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UTILIZATION OF CORPORATE PROFITS IN PROSPERITY AND DEPRESSION

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AUTHOR'S NOTE

In the literature on corporate profits, income administration, and cycle theory, there is an unusual conflict in deductive conclusions concerning the merits of surplus accumulation. While statistical studies agree that American corporations have consistently reinvested much of their profits, they by no means agree that stockholders eventually receive these withheld earnings during depression periods. The same data are used to show that the reinvesting of earnings is to the best interest of stockholders, and that the withholding of earnings is to the stockholders' detriment.

The inability to reach satisfactory conclusions is due to a surprising lack of data which reflect the experience of specific companies over a period of years. This study is an attempt to meet the need for a thorough analysis of the earnings of specific enterprises over at least one complete cycle, with the objective of showing how much of the profitable period earnings were reinvested as compared with the amounts paid in cash dividends, how the withheld earnings were invested, and what eventually happened to the investment.

It is an almost impossible task to assimilate and present corporate financial history in a manner which emphasizes income administration except by including formidable and deadening detail without which such a study loses its chief virtue. Inadequate reports, inconsistencies in accounting procedures, lack of comparable data, especially in valuation of properties, and juggling of reserve accounts, surplus balances, and stated capital, are a few of the technical annoyances.

The data presented in this study were assembled while the author was an instructor in accounting at the University of Michigan. Throughout the preparation of the manuscript Professors W. A. Paton, R. G. Rodkey, and M. H. Waterman gave valuable assistance and to them my indebtedness is gratefully acknowledged. Professor R. U. Ratcliff, Assistant Director of the Bureau of Business Research, made available clerical

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CONTENTS

	PAGE NUMBER
Chapter 1. The Problem of Income Administration.....	1
Need for Detailed Study of Corporate Income Adminis- tration	
Detachment of Ownership in Large Corporations	
Conflict of Interests	
Reasons for Surplus Accumulation	
Effectiveness of Corporate Reserves	
The Nature of Surplus	
Dependence of Dividend Payments upon Current Revenue	
Possible Benefits of Retaining Earnings	
Objectives of the Present Investigation	
Source of Data	
Companies Selected and Period Covered	
Characteristics of the Sample	
Adequacy of the Sample	
Surplus Reported by Companies Studied	
Chapter 2. Corporate Expansion, 1922-30.....	34
Reinvested Earnings, 1922-30	
Corporate Expansion	
Net Income Retained, 1922-33	
Chapter 3. Prosperity Earnings and Depression Dividends	45
Measurement of Dividend Performances	
Twenty-Five Per Cent of Companies with Best 1931-33 Dividend Record	
Thirty-Three Per Cent of Companies that Reduced Divi- dends Less than 65 Per Cent	
Forty Per Cent of Companies with Poorest Depression Dividend Records	
Prosperity Retained Earnings and Depression Dividends —Summary	

Chapter 4. Investment of Retained Earnings.....	66
Nineteen Companies that Increased Dividends in Depression Years	
Twenty-Nine Companies that Reduced Common Dividends More than 70 Per Cent	
Comparative Analysis	
Twenty-Four Companies that Paid Substantial Depression Dividends in Excess of Earnings	
Chapter 5. Asset Liquidation and Earning Deficiencies	80
Seventeen Companies Paying Depression Dividends Substantially in Excess of Earnings	
Eighteen Companies that Paid Dividends after Losses	
Ten Companies that Paid No Depression Dividends	
Summary	
Chapter 6. Conclusions	92

APPENDIXES

Appendix I. Industrial Classification of the Sample Showing Name of Company and Assets Invested by Each Company....	97
Appendix II. Some Problems in Income Determination	100
Appendix IIIA. Selected Examples of Companies that Paid Dividends Materially in Excess of Depression Earnings	113
Appendix IIIB. Selected Examples of Companies that Paid Dividends after Losses	119
Appendix IIIC. Selected Examples of Companies that Paid No Depression Dividends	124
Bibliography	129

LIST OF TABLES

NUMBER	PAGE NUMBER
1 Proportion of Annual Net Income of All Industrial Corporations Produced by One Thousand Largest Corporations, 1920-35	3
2 Gross Assets of Companies Included in Sample, Classified by Industry 1921 and 1936	31
3 Surplus of Companies Included in Sample, Classified by Industries, 1921-36	33
4 Classification of Companies by Percentage of Total Net Income Retained, 1922-30	35
5 Expansion from Retained Earnings, Selected Companies, 1922-30.....	36
6 Methods of Financing Expansion. Seventy-Two Companies, 1922-30 ...	37
7 Sources of Funds for Expansion, by Industries	39
8 Classification of Companies by Percentage of Earnings Retained, 1922-33	40
9 Corporate Expansion and Liquidation Through Prosperity and Depression	42
10 Comparison of Prosperity Earnings Retained with Depression Dividends Paid. Nineteen Companies that Increased Common Dividend Payments during Depression Years	47
11 Comparison of Prosperity Earnings Retained with Depression Dividends Paid. Twenty-Four Companies that Reduced Common Dividends Less than 65 Per Cent	50
12 Comparison of Prosperity Earnings Retained with Depression Dividends Paid. Twenty-Nine Companies that Reduced Common Dividends More than 70 Per Cent	60
13 Retained Earnings and Depression Dividends of Selected Automobile and Machinery Manufacturers	64
14 Sources and Application of Funds. Nineteen Companies Paying Larger Dividends during the Depression than during Prosperity	68
15 Utilization of Earnings and New Capital during Prosperity Period. Nineteen Companies that Increased Dividend Payments during Depression Years	69
16 Sources and Application of Funds. Twenty-Five Companies that Reduced Common Dividends More than 70 Per Cent	71
17 Utilization of Earnings and New Capital during Prosperity Period. Twenty-Five Companies that Reduced Dividends More than 70 Per Cent	73

NUMBER	PAGE NUMBER
18 Comparison of Fundamental Utilization Policies	74
19 Changes in Working Capital and Plant Assets, Prosperity Period. Nineteen Companies that Increased Dividend Payments during Depression Years	75
20 Changes in Working Capital and Plant Assets, Prosperity Period. Twenty-Five Companies that Reduced Dividends More than 70 Per Cent	76
21 Distribution of Companies by Percentage Increase in Working Capital and Plant Assets, Prosperity Period	77
22 Percentage Investment of Retained Earnings and New Capital Issues, Prosperity Period. Twenty-Four Companies Paying Depression Dividends Substantially in Excess of Current Earnings, Classified by Industry	78
23 Asset Expansion and Liquidation, 1921-33. Seventeen Companies Paying Depression Dividends Substantially in Excess of Earnings	81
24 Extent of Asset Liquidation, Depression Period. Seventeen Companies Paying Depression Dividends Substantially in Excess of Reported Income	82
25 Assets Liquidated to Greatest Extent, Depression Period. Seventeen Companies Paying Depression Dividends Substantially in Excess of Reported Earnings	83
26 Asset Expansion and Liquidation, 1921-33. Eighteen Companies Paying Substantial Depression Dividends after Operating Losses	84
27 Extent of Asset Liquidation, Depression Period. Eighteen Companies Paying Substantial Depression Dividends after Operating Losses	85
28 Assets Liquidated to Greatest Extent, Depression Period. Eighteen Companies Paying Substantial Depression Dividends after Operating Losses	86
29 Asset Expansion and Liquidation, 1921-33. Ten Companies Having Small Prosperity Earnings and Paying Only Nominal Depression Dividends	88
30 Extent of Asset Liquidation, Depression Period. Ten Companies Having Small Prosperity Earnings and Paying Only Nominal Depression Dividends	89
31 Assets Liquidated to Greatest Extent, Depression Period. Ten Companies Having Small Prosperity Earnings and Paying Only Nominal Depression Dividends	90
32 Percentage Distribution of Companies by Assets Liquidated to Greatest Extent, Three Groups of Companies	90

CHAPTER 1

THE PROBLEM OF INCOME ADMINISTRATION

Need for Detailed Study of Corporate Income Administration

From many sources there is voiced a growing desire for more detailed and specific data describing results of operating our corporate institutions. Governmental agencies, tax authorities, students of economics, and those interested in the social sciences generally are inquiring into such subjects as excess profits, size of companies and consequences thereof, dividend policies, marketing procedures and pricing policies, capital structure, payments to labor, methods of issuing securities, amount and nature of corporate surplus, and other detailed factors of corporate life. Particular attention is being given to the problem of the division of corporate income between payments to stockholders and additions to surplus, and to the manner of investing earnings retained. Many believe that maladministration of prosperity earnings by the large corporations contributed greatly to the economic collapse of 1929 and the subsequent depression, and maintain that cyclical behavior may be explained by this process of automatic saving and unwise investing. On the other hand, many writers and corporate officials point with satisfaction to the service performed by surplus reserves in carrying corporations through the years of severe losses.

There are few inductive studies which show specifically how much individual companies have earned over a long period of time, what portion of the earnings were reinvested, or how the retained earnings were utilized. Of even more significance, there are no comprehensive analytical efforts designed to demonstrate whether operating expenses and dividend payments are made possible during a depression by the accumulation of reserves during a prosperous era. In a concluding chapter of a recent publication by the National Bureau of Economic Research, Solomon Fabricant points out the need for further analysis of accounting records and specifically states that we need more

detailed information regarding corporate savings and how the savings have been invested.¹

Most studies dealing with corporate savings are based upon data compiled by the Internal Revenue Department. S. H. Nerlove, W. L. Crum, and others who have used the data most extensively in studying corporate profits express dissatisfaction with the aggregate figures and indicate a desire for more detailed data.² The undistributed profits tax and repeal of the tax are more recent factors tending to focus attention upon earnings and savings of specific enterprises. In his writings upon the undistributed profits tax, A. G. Buehler expressed a desire to obtain data indicating the specific uses of corporate savings in order to deal with the question concerning the extent to which corporate savings have been abused in recent years.³

"Accumulated corporate surpluses are widely credited with having cushioned the shock of the depression and statistics compiled by the Internal Revenue Department are used to prove the case. But no one has shown precisely how the surplus has functioned, and some economists are candidly skeptical of the proof submitted, as indicated by the following:

Prevalent opinion is that business enterprise created employment during the depression by spending accumulated surpluses. Income estimates, which show that income paid out exceeded income produced, have been used to prove this view, but this is a misuse of these income data, which in reality indicate disinvestment, and hence less employment.⁴

Detachment of Ownership in Large Corporations

The problem of corporate income administration is of vital public interest, in contrast to the affairs of single ownerships and partnerships. In theory as well as in practice, whatever a

¹ W. A. Paton, *Corporate Profits as Shown by Audit Reports*, National Bureau of Economic Research (New York: 1935), pp. 110-11.

² S. H. Nerlove, *A Decade of Corporate Incomes* (Chicago: University of Chicago Press, 1932), p. vii.

³ A. G. Buehler, *The Undistributed Profits Tax* (New York: McGraw-Hill Book Company, Inc., 1937), p. 79.

⁴ D. D. Humphrey, "The Relation of Surpluses to Income and Employment During Depression," *The American Economic Review*, Vol. XXVIII, No. 2, June, 1938, p. 223.

personally owned business organization makes belongs to the owner and his motives are rarely questioned, whether he builds a new plant, takes a trip to Europe, or invests his earnings in downtown real estate, government bonds, or South American securities.

The results of operating a corporate enterprise are viewed much more critically because of the vital element of managerial stewardship. In the United States today there are more than half a million corporations which file tax returns with the Bureau of Internal Revenue. Many of these corporations are relatively small semiprivate enterprises, but the "big" companies own a large portion of the aggregate invested assets and they account for more than one-half of all corporate income. Table 1

TABLE 1—PROPORTION OF ANNUAL NET INCOME OF ALL INDUSTRIAL CORPORATIONS PRODUCED BY ONE THOUSAND LARGEST CORPORATIONS, 1920-35
(Amounts in millions of dollars)

Year	Total Net Income of All Industrial Corporations	Net Income of One Thousand Largest Corporations	
		Amount	Per Cent of Industrial Total
1920	\$6,899	\$3,612	52.4
1921	3,597	2,062	57.2
1922	6,076	3,109	51.2
1923	7,453	3,831	51.4
1924	6,591	3,625	55.0
1925	8,060	4,515	56.0
1926	8,337	4,899	58.7
1927	7,459	4,225	56.6
1928	8,646	5,111	59.1
1929	9,456	5,889	62.3
1930	6,429	3,716	57.8
1931	3,683	2,325	63.1
1932	2,153	1,565	72.7
1933	2,986	1,804	60.4
1934	4,275	2,506	58.6
1935	5,165	2,579	50.0

Source: Compiled from *Statistics of Income for 1933*, and *Statistics of Income for 1935*: U.S. Treasury Department, Bureau of Internal Revenue, Government Printing Office, Washington, D.C., pp. 47 and 48, 1933, and p. 22 of 1935. (Number of companies approximately one thousand of the largest. Varies due to classifications. Figures before 1930 adjusted to a basis comparable with later figures.)

emphasizes the relative importance of the large corporations in producing the annual net income of all industrial corporations.⁵

Between 1920 and 1936, 300,000 to 500,000 corporations filed income tax returns each year, yet only 1,000 of the largest accounted for some 55 per cent of the total net income.⁶ Two hundred of the very largest corporations were responsible for 35 per cent of the net income, while the next 800 in size produced 20 per cent of the total. The National Industrial Conference Board estimates that the national wealth at the end of 1928 amounted to \$360,062,000,000, and year end total assets of the 200 largest corporations aggregated \$81,077,000,000 which is about 22 per cent of the estimated total.⁷

The significance and importance of these large corporations and their contribution to our productive capacity are made more vivid when gross revenue figures of corporations are compared with those of single ownerships and partnerships. There are 1,500,000 individually owned and partnership enterprises in this country, according to the last census figures available. The gross sales or production of corporations comprising the whole national income for 1933 was \$142,000,000,000, and the gross sales or production of the individual enterprises and partnerships was \$30,000,000,000, giving a grand total of \$172,000,000,000.⁸ From these figures it appears that 1,000 of the largest corporations do nearly 3 times as much business as all the single ownerships and partnerships combined.

Securities of most large companies are traded on organized exchanges and are in general widely held with the total corporate ownership to a considerable degree diffused. The Federal Trade Commission compiled data from 4,367 representative corporations showing the distribution of stock ownership in 1922. From the sample selected, total par value of common

⁵ In terminology used by the Revenue Department, these companies are classed as nonfinancial enterprises. Financial enterprises, in the language of the Internal Revenue Department, include banks, insurance companies, investment trusts, building and loan associations, and similar institutions.

⁶ Not all corporations reported net income, of course, because a corporation must file a tax return whether it makes a profit or not.

⁷ *The Conference Board Bulletin*, No. 38, National Industrial Conference Board, February 25, 1930, p. 303.

⁸ *Hearings Before the Committee on Finance, United States Senate on H. R. 12395*, 1936, pp. 887-928.

stock held by officers of the corporations was 10.7 per cent of outstanding common, and management owned 5.8 per cent of preferred stock outstanding.⁹

Separation of active control from ownership is more pronounced in the very largest corporations. R. A. Gordon's recent study based upon the two hundred "giant" industrial corporations which Berle and Means¹⁰ found to be the largest in the United States in 1929, shows that officers and directors of the largest industrial institutions own 3.6 per cent of the outstanding voting stock. However, in 17 per cent of the companies, management owned between 10 per cent and 25 per cent of the voting stock. The author concludes that management alone, on the average, tends to own an extremely small portion of the voting stock.¹¹

A recent study of security markets made by the Twentieth Century Fund estimates that in 1930 there were 10,000,000 individual stockholders, and that in 1932 the number had increased to approximately 11,000,000 individuals.¹²

Without critical examination of analytical methods, sources of information, or adequacy of samples, one can accept the general implications suggested by the figures just presented. Large corporations are a dominant element in the United States industrial life. Control and management of much of business activity is delegated to a small group who manage but do not own. *The element of stewardship is ponderous.*

Conflict of Interests

How have the small investors, who really constitute the large majority of common stockholders and who actually own these great corporations, been treated year after year? How successful have well known corporations been as business entities,

⁹ Federal Trade Commission, *National Wealth and Income* (New York), Table 90, p. 159.

¹⁰ A. A. Berle, Jr., and G. C. Means, *The Modern Corporation and Private Property*, Book 1, Chap. III.

¹¹ R. A. Gordon, "Ownership by Management and Control Groups in the Large Corporation," *Quarterly Journal of Economics*, Vol. LII, No. 3, 1938, pp. 367-400.

¹² Twentieth Century Fund, *The Security Market* (New York: 1935), pp. 50-53.

and have policies of income administration followed by the management been compatible with desires and best interests of the small owner?

It is easily understood that the ambitions of the management and desires of the many small investors may not always be harmonious. The "profit motive" guides owners under a capitalistic system of free private enterprise, prices, and competition, according to classical economists. In our economic society some 55 per cent of corporate income is produced by large institutions which are about 10 per cent owned by the managers. If profit is the motive, we may ask—profit to whom? Profit to the management appears in the form of high salaries, bonuses, dividends, appreciation of shares owned; and it may also result from inside knowledge of what may happen to the market price of shares, or from personal dealings between the management as individuals and the management as corporation officials. Profit to the small stockholder appears in the form of cash dividends and in market appreciation if he elects to engage in speculative trading.

Reasons for Surplus Accumulation

In American financial policy there has long existed the belief that a substantial portion of the earnings should remain in the business, and many reasons and arguments are introduced to justify the practice. Traditionally it has always been regarded as sound policy and a commendable virtue to save for a rainy day, although in recent years the practice has been questioned and even branded as an evil.¹³ Most business is subject to cyclical and seasonal influences, and the very fact that earnings are substantial in one period is popularly regarded as evidence that a less profitable or unprofitable season must be ahead.¹⁴ This urge to save, based upon the theory of "what goes up must come down," is discussed at length by Foster and Catchings in *Profits*.¹⁵ Keynes goes even farther with the rainy day idea as an urge to save and in somewhat spicy language suggests that saving becomes an obsession and an end in itself.¹⁶

¹³ W. Catchings and W. F. Foster, *Profits* (Boston: Houghton Mifflin Company, 1925), pp. 241-43.

¹⁴ H. M. Keynes, *Essays in Persuasion* (New York: Harcourt, Brace & Company, 1932), p. 370.

The most common and plausible reason for minimizing dividends arises in the plea for sheer conservatism. Conservatism in the distribution of corporate income is necessary on three counts. In the first place, the measurement of income is based upon postulates, estimates, assumptions, and judgments made by the accountant, and the reported figures are subject to considerable correction depending upon future events and economic trends which may be beyond managerial control. The difficulty of measuring periodic income is well understood and it is sufficient to say that business executives feel justified in accepting income figures with several grains of salt.

A second and closely related reason why annual income figures need to be regarded conservatively rests upon the arbitrary time intervals commonly used. In capital goods industries, especially, the productive process moves slowly, and it is almost sheer speculation to compute net income for one calendar year. Manufacturers made much of this point in testimony before the Senate Finance Committee before the passage of the Undistributed Profits Tax.¹⁵

Even if annual reported income figures could be accepted as absolutely accurate, there would still be some justification for conservatism in disbursing dividends because earnings fluctuate from year to year. Business managers point out in this connection that all profits paid out in good years with no reserve to absorb losses in poor years would eventually lead to complete liquidation of the enterprise. This position probably overstates the case, but it is easy to see that lack of working capital might become a serious problem from time to time under such circumstances.

Earnings are reinvested in American corporations because managers and investors alike desire to see their enterprise grow. Corporate management has reasoned that in a growing industry in a young country there must be ample room for expansion; that the business enterprise should invest earnings where the rate of return would be most attractive; and that the proper place is none other than the business itself. This attitude justifies retention of earnings for nearly any purpose and it is therefore considered proper financial policy to withhold current

¹⁵ Testimony of Frederick V. Grier, President of Cincinnati Milling Machine Company, Hearings Before Finance Committee, *op. cit.*, p. 510.

income from stockholders in order to facilitate any of the following corporate needs:

1. Strengthen the financial (working capital) position
2. Increase productive capacity
3. Eliminate an original overcapitalization (squeeze out the water)
4. Make it possible to pay dividends more regularly
5. Strengthen the long run credit position
6. Accumulate reserves as a protection against such hazards as a general depression, a changing demand for products, the possibility of new tax liabilities, and other contingencies
7. Set aside reserves in order to comply with legal requirements for dividends
8. Provide funds for the retirement of corporate securities

Undoubtedly there are other strong motives for reinvesting earnings which are hardly considered ethical even if consonant with sound finance and within the law. The plowing back of profits in order to reduce surtaxes on the income of wealthy stockholders has been much criticized in governmental circles and by those who feel that such procedure is unjust to smaller stockholders who would prefer a cash dividend. Moreover, on occasion surpluses have been accumulated by boards of directors who wished to manipulate the corporation's security prices or in order to speculate in inventories or in securities of other companies.

It is probably true that some managements gave little consideration to the needs or wishes of small investors in formulating dividend policies during the 1922-36 period, and that retained earnings resulted more from selfish reasons than from general conservatism. Dewing suggests that management chooses to expand and therefore to retain earnings in order to satisfy personal ambition, to appease the creative impulse, and to satiate the desire to speculate.¹⁶

One should not be too severe in criticizing particular industries and specific corporations for retaining substantial portions of their 1922-30 profits even if they were lost in the early thirties

¹⁶ A. S. Dewing, *Financial Policy of Corporations* (New York: The Ronald Press, 1934), pp. 694-97.

because of inventory price declines and idle plant facilities. The motives may have been commendable even if based upon economic fallacies and misconceptions and a popular custom of the times. Moreover, legal considerations, often none too soundly grounded, have had a bearing. The legal fiction which requires a surplus before dividends can be paid in excess of current earnings encourages corporate savings. Particular corporations such as banks and insurance companies are subject to a variety of restrictions upon their dividend payments on the assumption that surplus is necessary for the protection of depositors and policyholders, and they are required by law to accumulate a surplus. Bond contracts of industrial enterprises often provide for restrictions upon dividend payments in order to increase the stock equity as added protection for the creditors.

Many of the reasons given for retaining earnings have little merit, and there is considerable justification for the criticism of corporate savings. However, the chief explanation of small dividends is often overlooked. Much of the corporate saving during prosperous periods is semiautomatic and largely inevitable, and corporate managers may exercise little deliberate choice or control over the portion of earnings retained. When revenue volume is increasing, additional physical inventory is needed and increased unit costs require a substantial increase in inventory investments. Increased sales volume means a greater necessity for increased plant capacity and improved productive processes. When plant capacity is increased there is more pressure to sell, which leads to greater commitments in receivables. In order to profit from rising business volume this process is probably inevitable, and it might prove very difficult for management to avoid the increase in receivables, inventories, and plant facilities. The payment of dividends is considered at periodic dates usually months apart, and the cash balance and current position are likely to appear much more relevant than current income or surplus reserves in determining appropriate action.

Effectiveness of Corporate Reserves

Those familiar with the literature in the fields of corporate finance and accounting will recall any amount of eulogy

on the effectiveness of corporate surplus and the wisdom of retaining profits of prosperous periods in order to pay wages and dividends through depression years. Investors have been taught to pay lip service to the theory that reinvested profits and accumulating surplus reserves will result in a stable dividend rate which redounds to the benefit of stockholders. At the peak of the prosperous twenties L. H. Sloan of Standard Statistics wrote:

For a time at least even when earnings are low or nil, interest and current dividend obligations will be met out of surplus. There is ample basis for the belief that, in the past, the total payments annually to security owners has been one of the most stable elements in our economic structure.¹⁷

Along this same line, T. J. Kreps in a study of dividend disbursements and interest payments from 1929-32 concludes that a substantial portion of the interest and dividend payments came from surplus.¹⁸

Dr. E. R. A. Seligman, former president of the American Economic Association, has written that if corporations "set aside nothing for reserves and then have a succession of bad years they may be forced into bankruptcy."¹⁹

Noel Sargent, representing the National Association of Manufacturers, made the following statement in testimony before the United States Senate Committee on Finance on May 7, 1936:

Largely because of the existence of corporate surpluses it has been possible to maintain dividend payments in many companies during a period when earnings were not sufficient to permit such payments.²⁰

Many other economists and businessmen testified before the Senate Finance Committee in 1936 in an effort to prevent passage of the Undistributed Profits Tax. A. A. Ballantine, repre-

¹⁷ L. H. Sloan, *Corporation Profits* (New York: Harper & Brothers, 1929), p. 265.

¹⁸ T. J. Kreps, "Dividends, Interest, Profits, Wages, 1922-35," *Quarterly Journal of Economics*, August, 1935, p. 573.

¹⁹ E. R. A. Seligman, "Taxes on Surplus Called a Danger," *New York Times*, March 22, 1936, Section 3, pp. 1, 6.

²⁰ Testimony of Noel Sargent, Hearings Before Finance Committee, *op. cit.*, p. 659.

senting the Merchants Association of New York, presented figures showing that all business during the five years 1930-34 paid out \$26,500,000,000 more than was produced by those businesses.²¹ Mr. James Emery, General Counsel of the National Association of Manufacturers, said: "The facts demonstrate that corporate dividend payments over the past fourteen years are substantially 25 per cent in excess of earnings, and this has been particularly true in the field of manufacture."²²

Solomon Fabricant of the National Bureau of Economic Research has directed extensive research delving into corporate earnings and savings, most of the investigation being based upon income tax data. From these aggregate figures Mr. Fabricant writes the following conclusion:

During the post-War period a substantial portion of earnings (after taxes) was retained in the form of corporate savings. For the eight years, 1922-1929, these savings amounted to 32 per cent of net income after the deduction of income taxes. But the crash changed the situation completely, and by the end of 1932 accumulations of more than a decade had been drawn upon to sustain at least partially the income of stockholders. During only three years, 1930, 1931, and 1932, the profits saved in the preceding ten years were disbursed. Fortunate indeed were those with such a reserve upon which to draw.

A footnote qualifies the above statement:

These figures refer to the aggregate of all corporations. If the large corporations in which dividends constitute the chief means of distributing earnings were considered separately the reduction of surplus would not be so marked.²³

Joseph P. Kennedy in a feature article in *The Saturday Evening Post* extols the virtue of corporations in providing a reserve against the inevitable rainy day and points out that millions of people have become investors in securities and count upon continuity of their dividend returns in budgeting their living expenses.²⁴ Has the rainy day reserve to which Mr.

²¹ *Ibid.*, testimony of A. A. Ballantine, p. 422.

²² *Ibid.*, testimony of James Emery, p. 682.

²³ S. Fabricant, *Recent Corporate Profits in the United States* (New York: National Bureau of Economic Research, April 18, 1934), Bulletin No. 50, pp. 10-11.

²⁴ J. P. Kennedy, "Big Business, What Now?," *The Saturday Evening Post*, June 16, 1937, p. 80.

Kennedy refers provided "continuity of dividend returns" and "the continuous flow of dividends"?

It is customary for standard texts to mention the advisability of creating a surplus in order to pay dividends in lean years. For example, page 594 of *The Financial Handbook* says:

In most corporations it is expected that earnings will fluctuate. The regularization of dividends recommended above may be accomplished in the face of fluctuating earnings by paying out of the profits of prosperous years only a portion of the earnings, reserving the remainder in a dividend reserve or in a surplus account. This may be drawn upon for dividends in lean years.²⁵

Again on page 581 of the *Handbook* is the following:

Intermittent dividends, dependent upon the amount and frequency of net earnings may be distributed; or the directors may retain in earned surplus an amount sufficient to regularize dividends in spite of fluctuations of net earnings.

Every stockholder should know by this time that dividends do not come from surplus and that directors may retain in earned surplus an amount sufficient to regularize dividends and still not pay any dividends when earnings decline.

From accounting texts come the following statements:

The total amount of earned surplus is available for dividend declaration but sound business policy dictates that a reasonable portion of the profits of each year be retained in the Company for the following reasons . . . To provide funds out of which dividends may be paid in years when losses are sustained or the profits are small.²⁶

A surplus should be accumulated to meet unexpected losses and for other unseen contingencies. When this is done, if it seems wise, this surplus may be drawn upon to pay dividends in poor years when the profits are not sufficient for that purpose, and in this way dividends be equalized.²⁷

²⁵ R. H. Montgomery, *The Financial Handbook* (New York: The Ronald Press, 1937).

²⁶ R. L. Mannix, *Accounting for Corporations* (Boston: Insurance Press, Inc., 1934), p. 122.

²⁷ R. J. Bennett, *Corporation Accounting* (The Ronald Press, 1920), p. 134.

Corporations that are conservatively managed prefer to retain all earnings over the amount of reasonable dividends as a fund that will be available in case of economic depression or unforeseen contingencies.²⁸

In the management of Surplus, it is not the usual policy to distribute the entire amount available. Rather some should be retained in the business until at least a sufficiently large amount has been stored up to assure a fairly regular continuance of dividends during periods of poor business as well as when business is prosperous.²⁹

Just how does the retention of earnings in a profitable year provide a "fund that will be available in case of economic depression," or a "fund out of which dividends may be paid in years when losses are sustained," or a "surplus which may be drawn upon to pay dividends in poor years," and how is it that a corporate surplus may be "stored up to assure a fairly regular continuance of dividends during periods of poor business"?

Typical of the statistical data frequently presented to show the effectiveness of corporate reserves is the following excerpt from an article by G. H. Sage.

NECESSITY OF FINANCIAL RESERVES

The building up of adequate financial reserves, therefore, through the prosperous years for use in depression years as rainy day reserves, appears not merely desirable but in fact essential. In this connection the experience of American industry over the past decade and a half, especially in the last few years of the depression, is exceedingly revealing. From official treasury figures it appears that during the prosperous period 1922-1929 earnings generally increased; only part of them however, were distributed in the form of dividends, the balance being retained in the business. In the period 1930-1933, however, although earnings changed into substantial losses, dividends continued to be paid out of the surplus previously accumulated from undistributed earnings. For the 13 year period, in fact, dividends aggregated \$50,700,000,000 as against \$41,000,000,000 of final net income. Moreover, for the period 1930-1934 the disbursements of corporations exceeded receipts by \$26,600,000,000, all, it is to be noted, from so-called rainy-day reserves.³⁰

²⁸ J. O. McKinsey and H. S. Noble, *Accounting Principles* (South-Western Publishing Company, 1935), p. 454.

²⁹ R. B. Kester, *Principles of Accounting* (The Ronald Press, 1939), p. 468.

³⁰ G. H. Sage, "Dividend Policy and Business Contingencies," *Harvard Business Review*, Winter, 1937, p. 251.

The fallacy of such reasoning is easily demonstrated. Suppose only fifteen companies made reports to the treasury department over the period 1922-33. Before 1930 let us say each company retained one-half the total net income thereby creating rainy day reserves. It is entirely possible and reasonable to assume a 1930-33 record somewhat as follows:

Net Income of Five Companies, 1930-33	\$10,000,000
Dividends Paid by These Companies, 1930-33	9,000,000
Earnings Retained by Five Profitable Companies	\$ 1,000,000
Net Loss of Ten Companies, 1930-33	5,000,000
Dividends Paid by These Companies, 1930-33	-0-
Dividends Paid from Surplus,	
Fifteen Companies Combined	<u>\$ 4,000,000</u>

So far as official treasury figures are concerned, we could say the net income was \$5,000,000, dividends of \$9,000,000 were paid, and \$4,000,000 came from earnings retained in the twenties.

That surplus reserves do not insure corporate financial stability is hardly to be questioned, and there is considerable evidence that reinvestment of earnings may be made at the stockholder's expense. From time to time various writers have suggested that earnings should be distributed in large measure in the year earned regardless of the surplus situation, and that when funds are needed in the enterprise new capital should be secured through the issue of rights or through the regular capital markets. The 1936 Revenue Act taxing undistributed profits was specifically in line with this doctrine.⁸¹

⁸¹ George C. Haas, treasury expert testifying before the Committee on Finance, United States Senate, in 1936 said:

"It is argued by some that stockholders may be reluctant or even unwilling to reinvest in any given enterprise any large fraction of the earnings distributed to them in dividends. But this argument assumes that corporate management may justly reinvest earnings in a particular enterprise against the desire of the stockholders. In the last analysis, however, the earnings of a corporation belong to its stockholders; and stockholders are entitled to exercise a choice, which, under the present corporate practices they do not always possess, with respect to the disposition of these earnings. In so far as one effect of the proposed change will be to encourage corporate managements to obtain the consent of their stockholders for capital expansion, and to give to stockholders, the real owners of the corporation, a greater control over the disposition of their earnings, this effect is altogether desirable."

Rexford G. Tugwell, prominent in the early days of the New Deal, deplores the disturbing effects of corporate savings as contributing toward business fluctuations. He refers to the inexpert self-allocation of capital and explains that corporate surpluses are converted into industrial equipment by individual businesses without any general check on the likelihood of efficiency in use. Such a system in his opinion results in over-equipped and overexpanded companies and industries in some cases, while other concerns and industries starve for lack of capital.³²

It should not be inferred by any means that government officials are the only ones that believe stockholders or the investment market should direct the flow of earnings, savings, or new capital into industry. In his article "Depreciation and Savings," published in *The Accounting Review*, H. G. Kimball objects to withholding from the investor amounts charged to depreciation and not invested in plant assets during the fiscal year. He maintains that such action is harmful and results in dissipation of savings instead of their preservation.³³

The *Financial Handbook* voices some doubt concerning the policies of income administration followed in the past and points out that large surpluses create investment problems, that bigness is an obsession of American business, and that present evidence of tremendous excess of productive capacity in certain lines of industry indicates unwise expansion.³⁴

Just prior to 1920 corporate enterprises had made a tremendous amount of war profits. David Friday estimates that not more than one-fourth and probably not more than one-fifth of that profit ever was actually received by the stockholders.³⁵ Means and Ware, in *The Modern Economy in Action*, question the efficacy of corporate management in administering the earnings and suggest that the investors' interest is almost as completely at the mercy of the corporate control as is that of the

³² R. G. Tugwell, *The Industrial Discipline* (New York: Columbia University Press, 1933), pp. 203-27.

³³ H. G. Kimball, "Depreciation and Savings," *The Accounting Review*, December, 1935, pp. 365-69.

³⁴ Montgomery, *op. cit.*, p. 595.

³⁵ D. Friday, *Profits, Wages, Prices* (New York: Harcourt, Brace & Company, 1921), p. 68.

worker. They emphasize the fact that state laws which once limited the things which the directors of corporations could do with their stockholders' money have been liberalized, since states compete with one another for the lucrative business of chartering corporations and collecting from them taxes and fees.

In this situation, many stockholders have found that their board of directors is most adept at keeping the company's earnings from reaching them. Many and various devices are familiar to the student of corporate practices and to the stockholder who wonders what has happened to his expected dividends and to the market value of his stock. Large salaries may be paid to both necessary and superfluous officers—to the ever-convenient battery of vice-presidents, for instance; contracts for services, or for the purchase of supplies at exorbitant prices, may be given to companies in which directors have large interests; fifty-seven different varieties of stock issues may be brought out, each so complicated that the ordinary stockholder could not possibly be expected to understand the rights to which he was or was not entitled.⁸⁶

Graham and Dodd in examining the investor's interests in corporate profits and surplus are equally dissatisfied with common practices, and contend that stockholders are entitled to receive the earnings on their capital except to the extent they decide to reinvest in the business, and that management should retain or reinvest earnings only with the specific approval of the stockholders.

If it should become the standard policy to disburse the major portion of each year's earnings (as is done abroad), then the rate of dividend will vary with business conditions. This would apparently introduce an added factor of instability into stock values. But the objection to the present practice is that it *fails* to produce the stable dividend rate which is its avowed purpose and the justification for the sacrifice it imposes. Hence instead of a dependable dividend which mitigates the uncertainty of earnings we have a frequently arbitrary and unaccountable dividend policy which aggravates the earnings hazard. . . . In the end such fluctuations will work out more to his advantage than the present method of attempting, usually unsuccessfully, to stabilize the dividend by large additions to the surplus account.⁸⁷

⁸⁶ G. C. Means and C. F. Ware, *The Modern Economy in Action* (New York: Harcourt, Brace & Company, 1936), pp. 50-51.

⁸⁷ B. Graham and D. L. Dodd, *Security Analysis* (New York: McGraw-Hill Book Company, 1934), pp. 334-35.

The mere retention of earnings during periods of prosperity does not assure dividends at a later date, especially during years when the business operates at a loss. There are many who insist that retention of earnings from a profitable year may have little if any influence upon ability to pay dividends at any later time. That it is advantageous to stockholders if a large portion of earnings is retained in the business rests upon two assumptions. The basic premise assumes that whatever benefits the company is immediately of advantage to the stockholder. The conclusion that stockholders benefit when earnings are retained follows logically from the assumptions, but whether it is more advantageous to reinvest than to receive a cash dividend is a distinctly different proposition. Earnings withheld for corporate purposes naturally strengthen the company temporarily. Whether the action proves profitable to the stockholder depends upon subsequent events generally and timely action of the individual stockholder in selling his stock.

Even if we do not question the right of management to reinvest earnings without consideration of the stockholders' opinions, we find no agreement that the surplus thus created is any panacea for depressions or that dividends are maintained during slack periods because of surplus accumulations. Figures compiled from *Statistics of Income* and used to show that \$26,500,000,000 more was paid out than produced during the 1930-34 slump are interpreted in a very different light by members of the United States Treasury Department. These officials show that depression dividends, wages, and other payments came out of current receipts and not from accumulated liquid surpluses.⁸⁸

Don D. Humphrey shows that the *Statistics of Income* figures are misleading when used to prove that dividends and wages were paid from surplus during the depression years.⁸⁹ Albert Hubschman suggests that under present-day mass production technique sales are made before manufacture proceeds very far, that rainy day reserves are therefore unnecessary, and that wages and dividends paid during the depression did not exceed the current cash receipts.⁹⁰

⁸⁸ Testimony of George C. Haas, Hearings Before Finance Committee, *op. cit.*, pp. 59-60.

⁸⁹ Humphrey, *op. cit.*, pp. 223-34.

⁹⁰ Testimony of Albert Hubschman, Hearings Before Finance Committee, *op. cit.*

The Nature of Surplus

It would seem that a discussion of the nature of corporate surplus with its long standing position in law and finance is uncalled for, but it is quite apparent that ideas as to the functions and significance of corporate surplus are conflicting and somewhat confused. When it is affirmed that to the average citizen surplus means an excess of liquid funds over and above business requirements, one can be pardoned for some degree of dismay.

During the hearings before the Senate Committee on Finance pending passage of the 1936 Revenue Act, Senator Bailey wanted to know the amount of capital write-downs from 1931 through 1933. The figure disclosed was some \$15,000,000,000, and that stupendous sum prompted the following discussion:⁴¹

Senator Bailey: They could not remain solvent after the write-down, except for the fact that they made the write-down out of accumulated surplus. You could not write it out of capital structure; you have to write it out of surplus.

Mr. Haas: You can write the capital down as well as the other.

Senator Bailey: No. If you write-down the capital of a corporation, it becomes insolvent, and anybody can close it up. That is statutory. That is not a question of fact; that is a question of law. . . . Now, this write-down occurred without impairing the capital or making the corporations insolvent, and therefore they continued to operate. Suppose they had had no surplus, then the write-down would have broken every one of them and you would have this country filled with receiverships.

Mr. Haas: Whether they can withstand the situation that you pointed out is largely contingent upon the nature of their assets.

Senator Bailey: Just tell me how they would have withstood the write-down of \$11,000,000,000 in three years if they did not have a surplus to be able to write it down. They would have certainly become insolvent. It kept millions of people employed, it kept the industries going and they employed the labor.

Mr. Haas: No; I do not think so.

If one wishes proof to support the position taken by Mr. Haas it may be found in a study made by R. P. Marple in which he shows that legal capital has been used to absorb all sorts of losses and asset write-downs.⁴²

⁴¹ Hearings Before Finance Committee, *op. cit.*, pp. 61-62.

⁴² R. P. Marple, *Capital Surplus and Corporate Net Worth* (New York: The Ronald Press, 1936), pp. 96-97.

To those at all familiar with corporate finance and accounting technique it is well understood that surplus is simply a part of the stock equity and measures a cross section of all the assets of every kind. This much is certain: The surplus does not represent a cash fund; there is no way to look at the surplus figure and gain any notion as to what assets it may represent; and there is little direct relation between financial ability to pay dividends and amount of the surplus balance.

A few recognized authorities have made it clear that dividends in excess of current income may not be extensive, as suggested by the paragraph below:

The limited significance of surplus in relation to dividend disbursements requires emphasis, particularly in view of certain common misconceptions. Dividends are *appropriated* from surplus but are paid (as a rule) in cash. Surplus is the yardstick or gauge which shows the amount of dividends which may be declared without impinging upon capital, but is not in itself a medium of disbursement. Surplus, moreover, is in general supported by a cross-section of all the assets, rather than by a fund of cash or other liquid resources. This means that surplus accumulation as a reservoir for dividends in lean years does not actually insure the ability to maintain the stream of payments to stockholders. In fact dividends can seldom be long continued in the absence of current profits, no matter how large the surplus account.⁴⁸

Dependence of Dividend Payments upon Current Revenue

Earnings are retained when business is good. At such times corporate managers would be indeed pessimistic "kill-joys" if they could not see opportunities for a greater volume of business. Easier credit terms resulting in more accounts receivable and larger inventories are usually incidents of increased volume. With increased volume a realized fact, production methods and plant facilities need attention in the form of capital expenditures. As long as revenue volume is maintained at profitable prices the reinvested earnings pay dividends, but poor years and depression periods invariably make an uninvited and unwelcome, if not unexpected, appearance. The corporate managers may be wise to retain a portion of profitable year earnings for

⁴⁸ W. A. Paton, *Essentials of Accounting* (New York: The Macmillan Company, 1938), pp. 695-96.

purposes of increased business volume and to provide for future contingencies, but they do not and cannot set the earnings aside in some hoarded fund of cash or other liquid assets and cautiously await lean years when the fund will be utilized to pay dividends.

When the lean years come, sales volume drops off, profit margins disappear, collections slow down, and payables must be met. The retained earnings are invested primarily in inventories, receivables, and plant facilities—the *fund* or *reserve* to which we frequently refer. Receivables and inventories can be liquidated (probably at a loss), but the cash is not necessarily available for dividends. The business is geared to increased volume of production and must operate at reasonable capacity to be profitable. Working capital may be excessive at the moment of depression, but corporate management must conserve the cash in order to start production at the first signs of possible profitable operations on an increased scale. To pay dividends from liquidated inventories and receivables would be tantamount to borrowing money to pay dividends in the face of declining production, falling prices, and a discouraging immediate future outlook. Plant facilities built up during periods of profitable operation (thereby representing a major part of the surplus) usually prove excessive during slack periods of unprofitable operation. It is entirely possible to liquidate the surplus thus invested in plant capacity, inventories, and receivables, and the funds may be used for cash dividends, but this process of drawing upon reserves is wholly dependent upon continued sales and collections at *prices below costs* and is exactly what managers and stockholders seek to avoid. This process of disinvesting throws labor out of employment, is devastating to the market value of the stockholder's investment, and cannot be regarded as a satisfactory dividend reservoir.

Retained earnings need not be invested in the corporation at all, as many corporate managers could testify. Furthermore, a backlog of cash and liquid securities can be built up to provide dividends during depressions, but this procedure is wasteful and inexpedient and has not been followed extensively in practice. To create a reserve of idle cash funds is entirely foreign to American business psychology. In effect, corporate managers

would be saying: "We are operating profitably just now, but there may be danger ahead and we are afraid to expand the business. Therefore, we will keep part of the profits made this year, increase our bank account, and when times get bad you will be happy to receive a dividend check." The stockholder would undoubtedly be pleased to have a dividend check during poor years, but it might require considerable managerial courage to deplete the cash balance in periods of slack business when every kind of enterprise sets a premium on liquid reserves. It is very doubtful that investing retained earnings in government and municipal bonds would prove effective as a source of liquid funds in periods of general depression. If followed as a popular corporate practice, the securities would be dear during the upswing, and when needed, the market would be composed of many sellers and few buyers, thus forcing the corporation to buy at high prices and sell at low prices.

Retained earnings can be reinvested in business enterprises of a diverse nature, thus stabilizing income and distributing business risk. This holding of common stocks of other companies has been popular corporate practice, especially since the early twenties. It is obvious, however, that funds invested in equity securities are not available for corporate purposes during a severe depression.

Income once reinvested is exactly like all other corporate capital. If a stockholder buys one share of common stock in a company just beginning to operate, paying \$100 therefor, he has provided \$100 of the corporate capital. If at the end of three years total income of \$50 per share has been earned and no dividends paid, the stockholder has contributed \$150 of the total corporate capital. If total income had been paid to stockholders and additional stock sold, would the corporation be any less able to continue dividends? If bonds were issued to provide the additional capital, would capacity to pay dividends in the future be any different aside from the degree of caution necessary with considerable bonded debt in the capital structure? From whatever source the capital may come, it is amalgamated into a business enterprise and distribution of future income to equityholders is dependent entirely upon total income to be earned in the future. There is nothing sacred about the

dollars paid originally to create the corporation. Original dollars, reinvested earnings, and funds from new issues are exactly alike. Corporation law has placed a legal fiction around the formal stated capital on the assumption that creditors might be injured if this capital were paid to stockholders. If original capital is invested in a business which proves to be profitable, income can then be distributed, but if the enterprise is unprofitable, the original investment is lost. Income reinvested is exactly like the original capital in this respect and when losses occur, capital is impaired regardless of the legal fiction. Likewise, whenever dividends are paid there is a liquidation of corporate assets and a reduction in the common stock equity, and this liquidation of assets (aside from legal provisions) can be made as effectively from original capital as from surplus.

It is pertinent to remember that corporate ownership changes hands on the ticker tape and prices reflect the income retained as well as dividends paid. From the point of view of recent stockholders, reinvested earnings are part and parcel of the original capital and it would be senseless to assume future dividends would be paid just because a considerable portion of the price paid for the stock represents capitalized retained earnings.

Possible Benefits of Retaining Earnings

A word of caution is needed, not to qualify any of the statements made in relation to retaining earnings to pay future dividends, but to reiterate the writer's point of view. Earnings retained during the twenties by companies included in this study were not paid to stockholders to any appreciable extent during the poor years of the early thirties. It does not follow that reinvestment of earnings is to be deplored or that it is vicious practice and robs the common stockholder of his income. Earnings retained may result in much greater distribution of income to the stockholder *during the profitable periods* and market appreciation may be very attractive as a consequence. However, depression periods always come and it is wholly fallacious in theory as well as in practice to say that dividends withheld in the good years can or will be distributed in the bad years,

and many of the statistical studies purporting to show the stupendous amount of depression dividends which came from earnings retained through the twenties are misleading to say the least.

In this connection, it is recognized that any dividends at all in excess of current income must be declared from surplus created by reinvesting income of previous years or from surplus arising in some manner. A dividend cut of 80 per cent or more during the unprofitable years may therefore be a surprisingly modest reduction from the managerial point of view. The entire amount of dividends may very well be *declared* from *surplus* even though the funds to make payment may come from revenue of the period in excess of expenditures but less than the total cost of operation. In other words, surplus is likely to be invested in receivables, inventory, and plant assets to a considerable degree. This is not a "fund" or "reserve" which can be drawn upon directly for dividends, but output can be produced and sold during the poorest years if prices are reduced sufficiently. Sales below total cost of production liquidate the assets and consequently absorb the surplus. By this indirect method surplus is used to pay dividends during poor years, but to refer to the process as drawing upon a fund set aside for the purpose is unrealistic. We thus arrive at the anomaly that liquidation of large inventories and huge plant investments is not only the means of meeting operating deficiencies but is largely responsible for the losses in the first place.

There is no intention to minimize the extent of dividends paid through the most unfavorable period of business history and it is granted that even smaller amounts of depression dividends might have been paid had the companies retained little of the 1922-30 income. On the other hand, excess capacity of the corporations might have been much less and the depression of the thirties less severe if a more liberal dividend policy had been followed through the profitable twenties.

Objectives of the Present Investigation

The previous discussion introduces some aspects of income administration. It is evident that differences of opinion exist in

regard to who should have the right to declare dividends and who should decide how much should be paid; as to relative merits of paying out or retaining a major portion of the annual net income; as to how the retained earnings should be invested; and as to the advantages of having a corporate surplus. It is easy to deduce forcible arguments to answer these questions and able scholars have expounded various angles at great length, though supporting some theory in part perhaps due to personal interests or prejudices.

Never since the days of ancient Egypt has so much thought been given to reserves and to savings in years of plenty in order to provide for the "Seven Lean Years." The federal social security program providing for the most gigantic reserves ever assembled has produced a flood of comment and speculation on what reserves can be expected to do and where the limits may be anticipated. The "ever normal granary" for agricultural crops is another phase of the reserve idea of saving in good years in order to supply needs created by bad years. American corporations have for decades been committed to the theory of reserves and have proceeded to create huge surplus balances. The Revenue Act of 1936 taxing undistributed profits provoked mostly protests and criticism from economists and managers of business enterprises who prophesied dire consequences if corporations are not permitted free rein in building up surplus reserves. Are corporate surpluses, social security reserves, and agricultural surpluses similar in nature?

Most studies of corporate profits have been made from the managerial point of view or from a broad social economic point of view, but a corporate enterprise exists only because a group of investors pool their resources and create the invisible, intangible, artificial being with neither a "body to be kicked nor a soul to be damned." This investigation is made, therefore, from the point of view of the small investor who may have a few shares of common stock in a very large corporation.

During the stirring industrial activity of the twenties there was great corporate growth and expansion, financed by issuing new securities and by reinvesting profits. Within limits of the sample the relative expansion from the two sources is shown, with ample evidence to suggest that retention of earnings may easily have led to overexpansion of productive capacity.

The present investigation presents concise evidence on what financial policies have actually been practiced in the operation of prominent, generally profitable, and widely owned American corporations engaged chiefly in the manufacture and distribution of basic commodities from 1922 through 1936. During these years of prosperity and depression there was ample opportunity to retain a part of abundant earnings and to create extensive surplus reserves. For several years after 1930, many and perhaps most business organizations had sufficient demands made upon reserves to test their efficacy in meeting financial reverses and stormy weather. It seems highly pertinent in this connection to know just how much a number of large corporations have earned, what portion of the income was paid in dividends, and what percentage of the total income was retained in the business. The year to year aggregates of an industry have little bearing on the problem. The vital issue to the investor is how much he receives in cash dividends from a specific company year after year, how much of the amount available for dividends is withheld without his active voice in the matter, and how the retained portion is invested. The amount of net income reported to the stockholder is not the end of the problem, however. Profits and losses entered directly in the surplus and reserve accounts may be just as potent in providing or dissipating funds available for dividends as items reported as expense or revenue. Reserves provided for contingencies, accidents, insurance, foreign exchange fluctuations, and other possible events represent net assets and net worth earmarked (after a fashion) to absorb the shock of a possible event, and if the events never occur, the reserves represent earnings, pure and simple.

The heart of the controversy over policies of income administration is whether or not earnings of profitable years can be reinvested and drawn upon to pay dividends in depression periods. This study presents a fifteen year record of well known corporations and shows the extent to which regular common dividends were paid by these individual companies during periods of profitable operation and through the severe depression and indicates the degree of causal relationship between cash dividends paid in poor years and the percentage of earnings retained in the good years.

In a study of corporate savings it is of vital interest to know what becomes of earnings that are retained. In Chapter 4 income sheet and balance sheet data of each company are summarized for each phase of the cycle and the uses to which retained earnings were put are emphasized. Of equal significance is the liquidation of assets when companies operate at a loss, because the entire validity of surplus reserves must be determined at this point.

When corporate directors elect to withhold earnings in a given period, a surplus balance results. In the process of profitable operation, revenue and income exceed costs of production. Assets which measure the volume of income and revenue therefore exceed costs of production plus distributions to investors, and represent the surplus increase. In unprofitable years losses are charged to surplus as a balancing entry, but when costs exceed revenue the deficiency must be met from asset liquidation of some description or new equities must provide the needed funds. Year after year the changes in asset categories are measured and related to profits or losses. For a fair cross section of industry we have explicit data showing what portion of retained earnings went into working capital, what percentage was utilized for plant expansion, what fraction was used to retire debt, and, in short, what became of the surplus in specific instances as well as in aggregates for an industry or group of companies. This treatment throws considerable light on the process of providing liquid funds to pay for actual disbursements when revenue is insufficient to meet expenses or expenditures.

Many incidental problems are connected with the broad study of corporate income administration, but the central theme and thesis of the material presented in this study is to show by specific companies the earning and dividend records during the prosperous twenties and to demonstrate that a very small portion of dividends withheld during the good years reached the stockholder during poor years. Seventy-two specific examples are analyzed to show how the surplus was invested when profits were retained and to show the process of asset liquidation during the period of severe operating losses. In the past, have corporations been able to use the rainy day reserves effectively, and, if so, what form or type of investment proved most satisfactory?

If a corporation can live off its surplus fat when the need arises, does it make any difference what part of the anatomy is fattest?

Source of Data

Reports to stockholders are the primary source of information available to the general public concerning corporate affairs. No matter how deficient the financial statements may be, the individual investor relies directly or indirectly upon this information for his investment analysis. In an analysis of corporate earnings and how they are utilized, viewed from the position of one of the eleven million ordinary citizens who own the corporations, it is logical to base the investigation upon data taken from reports to stockholders.

In the library of the School of Business Administration at the University of Michigan there are reports to stockholders of more than five hundred American corporations including railroads, banks, public utilities, insurance companies, and industrial enterprises of all sizes operating in all parts of the United States. These reports to stockholders provide the raw material for the present investigation.

Companies Selected and Period Covered

A sample of companies is desired which will enable us to measure corporate earnings over a considerable period of time and through at least one complete business cycle. Industrial enterprises provide the best examples of very rapid self-financed growth, huge amounts of reported profits and scanty cash dividends, large surplus balances, great excess productive capacity, and companies which attract the investor to make speculative commitments. We desire to know how profitable these companies have been and to observe their policies of income administration in view of all the business events over a period of time long enough for most economic forces to be reflected in the operating reports.

Transportation, public utility, finance, mining, and oil companies are eliminated because these industries are subject to varying degrees of governmental control and regulation or have peculiar problems of depreciation and depletion accounting. In addition, the capital structure of transportation and public utility companies consists of bonds and preferred stocks to a

great extent, and we are more interested in income administration from the point of view of the common stockholder in companies where common stock owns much of the total invested assets.

A considerable number of reporting companies published income sheets or balance sheets or both which proved to be too condensed for analysis, and in other cases the net income reported minus dividends paid does not by any means agree with changes in balance sheet surplus. The essence of a study of retained earnings is to determine what becomes of the surplus, hence in those cases where there was totally inadequate information and no hint at a surplus analysis it was necessary to eliminate the company from the sample. Some corporations which published adequate reports in the early twenties were absorbed by other firms, were liquidated, or otherwise disappeared from the business scene. A few companies were reorganized one or more times during the period and in the process went through so many contortions of revaluing assets and substituting new equities for old that the amount of retained earnings became completely obscured, and of course these companies could not be included in the sample.

During the war and immediately thereafter earnings and financial policies were influenced predominately by war activities and it would seem of little value to go into that period to study corporate profits. The postwar correction of 1921 brought about severe declines in inventory values, liquidation of receivables, and a return to more stable price levels in general. The balance sheets of 1921 reflect the new price levels which remained unusually stable through 1930, thus providing an admirable condition for the study of earnings and their uses. If we include the fifteen years 1922-36 the period covers a decade of prosperity, the collapse during the early thirties, and a period of recovery after 1933.

Characteristics of the Sample

After eliminating companies which did not operate throughout the period, those reorganized beyond recognition, and those which reported entirely inadequate information, reports to

stockholders of seventy-two well known corporations engaged in twelve distinct lines of industrial activity were available for study.

The writer is well aware of the biased nature of the sample when compared to all corporations. Any company which remained in business from 1921 through 1936 and published reports to stockholders (certified in most instances by leading accounting firms) must have been profitable or else very strong at the beginning of the period. The peculiar concern of this study, however, is to discover what has been done with corporate earnings over a long period of time in the larger and generally more profitable concerns where the small stockholder has little voice in the matter. If some of the companies were unprofitable throughout the period, so much the better. How can an unprofitable enterprise survive for fifteen years? Analysis of the reports from unprofitable concerns helps to explain the process of liquidating assets in order to meet losses.

Within limits of reports available, every effort was made to secure a representative number of corporations engaged in several distinctly different types of industrial enterprise in order to determine whether companies in one kind of business activity administer income in a fashion characteristic and peculiar to the industry. Much has been said about overexpansion of plant facilities in the manufacture of heavy equipment and capital goods such as railway equipment, machine tools, iron and steel, agricultural equipment, rubber, and automobiles. It should prove interesting to see how the prominent companies in these industries financed plant expansion and if it was accomplished from reinvested earnings the implications would seem very significant, especially in relation to an undistributed profits tax. A large commitment in plant assets appears essential to the manufacture of capital goods regardless of the source of investment. Companies engaged in mercantile and trading activity, in the manufacture and sale of tobacco and beverages, and in food processing, must have an asset structure greatly different from companies engaged in capital goods manufacture. Much of their capacity to produce profits evidently comes from advertising campaigns, trade-marks, and brand names, and consequent good will, while a substantial portion of the total assets must be represented by receivables and inventory.

Adequacy of the Sample

Names of the seventy-two companies included in the sample are presented in Appendix I in order to show the wide range of industrial activity represented and the size of enterprises selected.

In order to draw conclusions and to generalize, it is important to know how much of each industry is included in the sample analyzed. Standard Statistics Company publishes a classified bi-weekly survey analyzing investment possibilities in most companies of market significance.⁴⁴ This list appears to be an ideal device to test the selected sample, since it includes practically all companies worthy of investment consideration on a wide scale, but does not include those which are closely held and of a semiprivate enterprise nature. The Standard Statistics list was examined as of July 7, 1937, and compared with the selected sample. Gross assets of each company not included in the study were tabulated from Standard Statistics for the year 1936, while the 1921 year end figures were obtained from Moody's Industrial Volume of 1922.

In Table 2 assets of seventy-two companies included in the twelve industries are combined in order to show the size and significance of the sample. With seventy-two companies engaged in twelve distinct lines of business activity employing in the neighborhood of ten billion dollars of invested assets, there should be adequate opportunity to determine how depression dividends were paid and how the surplus was used. The percentages in Table 2, it should be made clear, represent the fraction of assets owned by companies included in this study compared to the total assets invested by all important companies which engaged in each industry during all of the fifteen years examined. In all industries except automobile equipment manufacture and retail trade, the companies examined comprise over 60 per cent of all assets invested in the industry by important corporations which operated during the 1922-36 period. Companies which constitute the retail trade sample are fairly representative and comprise almost one-half of the industry. The

⁴⁴ Standard Trade and Securities, *Basic Survey* (New York: Standard Statistics Company, Inc.), Volume 85, No. 2, Section 2, July 7, 1937.

most unsatisfactory sample of all, automobile equipment, has little to recommend it except the totally random nature of selection. If the industry is peculiar in regard to its dividend policy or if retained earnings were invested in some unusual manner by manufacturers of automobile supplies even the limited sample should reveal the fact.

TABLE 2—GROSS ASSETS OF COMPANIES INCLUDED IN SAMPLE, CLASSIFIED BY INDUSTRY, 1921 AND 1936
(Amounts in thousands of dollars)

Industry	1921		1936	
	Amount	Per Cent of Industry Total*	Amount	Per Cent of Industry Total*
Railway equipment	\$ 357,990	63.43	\$ 279,933	61.08
Machinery manufacturing	686,770	68.25	921,853	69.50
Electrical equipment	504,080	98.78	582,604	98.58
Tire and rubber	641,750	91.68	654,501	94.81
Iron and steel	3,079,918	81.48	3,262,238	80.40
Automobile	618,461	70.37	1,601,714	91.25
Automobile equipment	89,493	29.11	111,336	23.29
Chemical producing	691,449	61.86	1,288,518	86.27
Metal container	161,758	100.00	316,108	100.00
Food processing	435,993	65.05	569,407	59.47
Retail merchandising	400,548	51.56	749,167	45.11
Tobacco and beverage	548,583	81.72	758,584	87.89
Total	\$8,216,793		\$11,095,963	

* This percentage expresses the relationship between gross assets of companies included in the sample and total gross assets of all important companies in the industry.

Surplus Reported by Companies Studied

Reference has been made to the virtues of corporate surplus as a panacea for financial difficulties likely to arise during periods of depression, and excerpts were quoted some of which praised the creation of surplus while others ridiculed the idea. It may be interesting to observe the surplus figures reported by the seventy-two companies included in the study. Table 3 shows that the sample is large enough and that selected companies possess enough surplus to test thoroughly the effectiveness of surplus liquidation in meeting the difficulties brought about by the "rainy days."

In each industry surplus was greater in 1929 and 1930 at the end of the boom period than at the 1921 year end where the analysis begins. To some extent at least corporations were saving for some purpose and in most industries the surplus increase during the prosperity period was very material. In every industry surplus decreased during depression years. In aggregate, with from two to three billion dollars of surplus, the sample should prove entirely adequate to reveal any uses to which surplus can be put. Doubtless individual companies created much greater surplus reserves than others, and careful examination of the earnings record, dividends paid, and methods of investing the retained earnings by each of the seventy-two companies should throw considerable factual light on how the surplus reserves were relied upon during the poorest years.

CORPORATE PROFITS

33

TABLE 3—**SURPLUS OF COMPANIES INCLUDED IN SAMPLE, CLASSIFIED BY INDUSTRIES, 1921-36**
 (Amounts in thousands of dollars)

Year	Industry							Tobacco	Retail Trade	Food Processing	Metal Container	Automobile Equipment	Motor Cars	Tire and Rubber	Iron and Steel	Electrical Equipment	Machinery Manufacturing	\$ 82,290
	Railway Equipment	Machinery Manufacturing	Electrical Equipment	Tire and Rubber	Iron and Steel	Motor Cars	Automobile Equipment											
1921	\$ 125,322	\$ 112,451	\$ 58,104	\$ 790,496	\$ 107,952	\$ 32,546	\$ 196,937	\$ 229,985	\$ 94,204	\$ 43,183	\$ 89,698	\$ 776,168	\$ 776,168	\$ 776,168	\$ 776,168	\$ 776,168	\$ 776,168	\$ 776,168
1922	87,134	118,931	127,721	7,810	143,845	37,918	174,351	327,174	62,226	41,011	80,774	1,775,478	1,775,478	1,775,478	1,775,478	1,775,478	1,775,478	1,775,478
1923	95,443	118,930	126,349	80,738	87,952	204,112	42,754	66,127	62,901	109,874	1,993,406	2,118,608	2,118,608	2,118,608	2,118,608	2,118,608	2,118,608	2,118,608
1924	97,443	138,927	125,561	104,835	90,233	138,611	45,027	217,728	48,932	65,101	81,077	144,163	144,163	144,163	144,163	144,163	144,163	144,163
1925	83,042	162,830	137,563	134,661	927,057	225,057	49,732	212,659	61,221	79,291	109,574	171,518	2,354,205	2,354,205	2,354,205	2,354,205	2,354,205	2,354,205
1926	106,587	189,684	157,285	130,841	1,008,611	305,380	56,321	241,632	68,891	96,401	136,334	197,259	2,591,066	2,591,066	2,591,066	2,591,066	2,591,066	2,591,066
1927	100,310	199,067	172,019	141,410	832,305	332,602	62,560	293,545	53,478	101,180	167,574	172,191	2,628,251	2,628,251	2,628,251	2,628,251	2,628,251	2,628,251
1928	93,616	160,569	199,764	113,167	866,029	472,159	67,308	330,384	61,351	117,436	207,410	201,227	2,888,420	2,888,420	2,888,420	2,888,420	2,888,420	2,888,420
1929	97,208	185,458	254,025	100,814	914,412	570,624	67,176	399,605	74,941	138,434	233,414	222,493	3,269,604	3,269,604	3,269,604	3,269,604	3,269,604	3,269,604
1930	50,532	197,691	261,346	94,449	498,068	65,728	472,449	85,897	145,025	232,818	265,359	3,271,795	3,271,795	3,271,795	3,271,795	3,271,795	3,271,795	
1931	79,651	162,921	231,554	30,306	850,725	419,521	56,651	366,714	87,110	133,899	228,938	290,368	2,957,098	2,957,098	2,957,098	2,957,098	2,957,098	2,957,098
1932	58,614	130,814	170,277	7,236	712,399	326,611	47,275	322,551	84,899	113,944	188,487	310,906	2,485,453	2,485,453	2,485,453	2,485,453	2,485,453	2,485,453
1933	49,323	122,294	144,192	14,103	653,065	334,564	51,782	334,144	91,363	106,653	213,378	249,812	3,209,682	3,209,682	3,209,682	3,209,682	3,209,682	3,209,682
1934	41,459	118,715	137,960	16,722	353,566	344,347	53,322	353,290	89,010	106,824	230,335	280,491	3,289,915	3,289,915	3,289,915	3,289,915	3,289,915	3,289,915
1935	37,666	147,611	151,322	27,549	62,420	442,576	55,093	391,545	95,495	106,246	265,009	231,468	2,299,166	2,299,166	2,299,166	2,299,166	2,299,166	2,299,166
1936	37,157	179,111	161,031	51,744	344,473	493,521	57,553	401,599	97,534	101,010	274,312	229,283	2,431,328	2,431,328	2,431,328	2,431,328	2,431,328	2,431,328
No. of companies		6	11	2	4	7	7	5	7	2	8	6	7	7	6	7	7	

CHAPTER 2

CORPORATE EXPANSION, 1922-30

Reinvested Earnings, 1922-30

From the managerial point of view, total income is all income available for distribution to securityholders whether in the form of interest or dividends. It is sometimes suggested that income taxes represent a distribution of income to the government for its participation in the business enterprise, but total income is here defined as "Income after Taxes." Reports to stockholders for these companies were certified by prominent public accounting firms and it is fair to assume that reported figures are reasonable estimates of the actual accrued income, especially when the entire nine years are included in one period.

It is difficult to state categorically what constitutes retention of earnings in sizable proportions, but perhaps we can agree that 40 per cent or more of total income retained in the business for a decade constitutes a considerable degree of surplus accumulation. By the same arbitrary rule, we can say that retention of only 25 per cent or less means generous distribution of the income. Seventeen of the seventy-two sample companies (about 24 per cent) retained more than one-half their total income through the profitable years, and thirty companies (42 per cent of the enterprises) retained more than 40 per cent of their income. Fourteen companies (19 per cent of the sample) distributed to equityholders 75 per cent or more of the good year earnings and retained 25 per cent or less. Between these extremes are the companies which followed a middle-of-the-road course in reinvesting earnings. In summary:

14 companies, 19% of sample, retained less than 25% of income

28 companies, 39% of sample, retained 25% to 40% of income

30 companies, 42% of sample, retained more than 40% of income

Table 4 shows in more detail the extent to which earnings were retained during the prosperous twenties. Forty-six of the seventy-two companies (64 per cent) retained between 30 per cent and 55 per cent of total income during the good years.

TABLE 4—CLASSIFICATION OF COMPANIES BY PERCENTAGE OF TOTAL NET INCOME RETAINED, 1922-30

Per Cent Retained	Number of Companies	Per Cent Retained	Number of Companies
Less than 5	2	45-49.9	5
5- 9.9	1	50-54.9	8
10-14.9	1	55-59.9	4
15-19.9	5	60-64.9	2
20-24.9	5	65-69.9	2
25-29.9	3	70-74.9	-0-
30-34.9	12	75-79.9	-0-
35-39.9	12	80-84.9	-0-
40-44.9	9	85-89.9	1

Table 5 displays by name thirty-one companies which retained much of their earnings, and fourteen corporations which paid generous dividends. In order to give some idea of the magnitude of earnings retained in nine profitable years, the total income retained is expressed as a percentage of net assets invested as of January 1, 1922. This percentage figure shows also the extent of expansion resulting from reinvested income during the prosperity period.¹

It is interesting to observe that companies from the various industries are included in both groups, although retail merchandisers are prominent in the group retaining a high percentage of earnings. Those companies marked with an asterisk have more than \$100,000,000 of invested assets. There is little indication that these large companies retain more or less of their income than companies of any other size. Of the twenty-seven *largest* companies, eight retained more than 40 per cent of prosperity period earnings and seven retained less than 25 per cent. Fourteen of the companies have less than \$25,000,000 of assets invested. Seven of these retained over 40 per cent of their income and only one retained less than 25 per cent.

¹ In most cases the prosperity period ends with 1929 or 1930, but in a few instances the period extends through 1931. Major tobacco companies operated most profitably until 1933. *Net assets* is defined as total assets minus current liabilities.

TABLE 5—EXPANSION FROM RETAINED EARNINGS
Selected Companies, 1922-30

Name of Company	Per Cent of Total Income Retained	Increase in Assets from Retained Earnings†
Thirty-One Companies that Retained a Large Fraction of Total Income		
Spicer Manufacturing Corp.	88	70
Mullins Manufacturing Corp.	65	57
Hershey Chocolate Corp.	68	121
Sears, Roebuck & Co.*	63	85
J. C. Penney Co.	60	371
S. S. Kresge Co.	59	228
Chrysler Corp.	59	117
Firestone Tire & Rubber Co.*	58	103
Mathieson Alkali Works, Inc.	55	75
Deere & Co.	53	37
National Acme Co.	53	5
J. I. Case Co.	52	43
Borden Co.*	50	104
Continental Can Company, Inc.	50	108
Hart, Schaffner & Marx	50	44
F. W. Woolworth Co.*	50	108
Loose-Wiles Biscuit Co.	49	39
Otis Elevator Co.	49	98
May Department Stores Co.	48	59
Mack Trucks, Inc.	47	87
American Can Co.*	46	51
Nash-Kelvinator Corp.	44	268
International Harvester Co.*	44	34
Air Reduction Company, Inc.	42	114
Packard Motor Car Co.	42	80
Reo Motor Car Co.	41	78
Gulf States Steel Corp.	41	16
Allied Chemical & Dye Corp.*	40	42
Coca-Cola Co.	40	117
Timken Roller Bearing Co.	40	207
Fourteen Companies that Retained a Small Fraction of Total Income		
American Tobacco Co.*	24	41
Consolidated Cigar Corp.	24	91
Allis-Chalmers Manufacturing Co.	22	13
Bethlehem Steel Co.*	22	17
Wheeling Steel Corp.	22	13
Baldwin Locomotive Works	18	9
Electric Storage Battery Co.	18	27
Worthington Pump & Machinery Corp.	18	6
National Biscuit Co.*	17	30
E. I. du Pont de Nemours & Co.*	15	23
Republic Steel Corp.*	12	5
Crucible Steel Company of America	6	2
American Locomotive Co.	---	-18
American Car and Foundry Co.	---	-3

* Invested assets of \$100,000,000 or more.

† 1922-30 retained earnings as a per cent of 1921 assets.

Corporate Expansion

Table 6 shows the importance of reinvested earnings as a means of financing corporate growth. Over 44 per cent of the companies grew from reinvested earnings entirely, while almost three-fourths of these manufacturers financed at least 50 per cent of their growth from within.² It is recognized, of course, that if a concern retains all of a scant income it is of little significance to say that 100 per cent of the expansion came from plowed-back earnings because the growth may be negligible. It is equally obvious that the companies such as Air Reduction, Borden, and Pillsbury Flour, whose reinvested incomes account for a small fraction of the expansion, financed their growth to an important extent from profits. In nearly one-half the cases, profits reinvested were equal to 50 per cent of total assets at January 1, 1922, and in many cases the assets increased more

TABLE 6—METHODS OF FINANCING EXPANSION
Seventy-Two Companies, 1922-30

Name of Company	Source of Expansion Funds		Extent of Expansion from Retained Earnings* (Per Cent)
	Per Cent from Retained Earnings	Per Cent from New Issues	
Allied Chemical & Dye Corp.	100	—0—	42
American Can Co.	100	—0—	51
Coca-Cola Co.	100	—0—	117
Deere & Co.	100	—0—	37
General Electric Co.	100	—0—	44
Hart, Schaffner & Marx	100	—0—	44
Hershey Chocolate Corp.	100	—0—	121
Hudson Motor Car Co.	100	—0—	383
Motor Wheel Corp.	100	—0—	66
Nash-Kelvinator Corp.	100	—0—	268
National Acme Co.	100	—0—	5
New York Air Brake Co.	100	—0—	28
Packard Motor Car Co.	100	—0—	80
Quaker Oats Co.	100	—0—	63
Reo Motor Car Co.	100	—0—	78
R. J. Reynolds Tobacco Co.	100	—0—	107
Sears, Roebuck & Co.	100	—0—	85
Spicer Manufacturing Corp.	100	—0—	70
Timken Roller Bearing Co.	100	—0—	207
United States Steel Corp.	100	—0—	15
F. W. Woolworth Co.	100	—0—	108
Worthington Pump & Machinery Corp.	100	—0—	6
Wm. Wrigley, Jr. Co.	98	2	137
Corn Products Refining Co.	97	3	21

—Continued

² In many cases stocks or bonds were issued to provide funds for immediate expansion and the securities were then retired from retained income.

TABLE 6—Continued

Name of Company	Source of Expansion Funds		Extent of Expansion from Retained Earnings* (Per Cent)
	Per Cent from Retained Earnings	Per Cent from New Issues	
Pittsburgh Plate Glass Co.	97	3	56
Otis Elevator Co.	95	5	98
California Packing Corp.	92	8	47
American Brake Shoe & Foundry Co.	89	11	45
Electric Storage Battery Co.	89	11	27
Loose-Wiles Biscuit Co.	86	14	39
International Harvester Co.	81	19	34
General Motors Corp.	80	20	119
S. S. Kresge Co.	78	22	228
General Cigar Company, Inc.	75	25	29
May Department Stores Co.	74	26	59
United States Rubber Co.	74	26	13
Mathieson Alkali Works, Inc.	71	29	75
Westinghouse Electric & Manufacturing Co.	71	29	40
Mack Trucks, Inc.	70	30	87
Commercial Solvents Corp.	69	31	38
Lima Locomotive Works	69	31	16
American Tobacco Co.	67	33	41
Liggett & Myers Tobacco Co.	66	34	58
Chicago Pneumatic Tool Co.	65	35	18
J. I. Case Co.	64	36	43
J. C. Penney Co.	64	36	371
Owens-Illinois Glass Co.	61	39	35
Goodyear Tire and Rubber Co.	58	42	32
Fairbanks, Morse & Co.	58	42	34
National Biscuit Co.	54	46	30
Chrysler Corp.	53	47	117
Union Carbide & Carbon Corp.	52	48	37
Mullins Manufacturing Corp.	50	50	57
Allis-Chalmers Manufacturing Co.	49	51	13
Air Reduction Company, Inc.	45	55	114
Inland Steel Co.	42	58	46
Continental Can Company, Inc.	41	59	108
B. F. Goodrich Co.	41	59	27
Pillsbury Flour Mills Co.	38	62	159
E. I. du Pont de Nemours & Co.	37	63	23
Firestone Tire and Rubber Co.	36	64	103
Borden Co.	35	65	104
Crucible Steel Co. of America	32	68	2
Consolidated Cigar Company, Inc.	29	71	91
Wheeling Steel Corp.	27	73	13
Baldwin Locomotive Works	27	73	9
American Cyanamid & Chemical Corp.	19	81	36
Gulf States Steel Corp.	18	82	16
Bethlehem Steel Corp.	18	82	17
Republic Steel Corp.	3	97	5
American Locomotive Co.	-0-	100	-18†
American Car and Foundry Co.	-0-	-0-	-3†

* 1922-30 retained earnings as a per cent of 1921 assets.

† Net liquidation.

than 100 per cent from profits retained in the nine profitable years.

Table 7 shows the percentage of total income retained by the various industries and the extent of expansion accounted for by earnings. Railway equipment companies as an industry distributed all earnings of the twenties. There was little expansion and new issues provided whatever funds were required. Steel manufacturers, industrial chemicals, and major tobacco companies each retained a small fraction of boom year profits. Retail merchandisers, can manufacturers, automobile manufacturers, and machinery manufacturers retained in industry aggregates unusually large portions of total income. Manufacturers of automobiles and machinery might expect highly fluctuating earnings due to cyclical factors and consequently retain earnings of profitable years to provide for rainy days, but the can manufacturing duopoly and retail merchandisers could hardly be included in the same category. It seems doubtful, therefore, that corporate management has considered seriously the nature of an industry and probable fluctuating income when formulating capital structures and consequent dividend policies. At least, other factors overshadow and render the stability of income of minor significance.

TABLE 7—SOURCES OF FUNDS FOR EXPANSION, BY INDUSTRIES

Industry	Per Cent of Total Income Retained 1922-30	Per Cent of Expansion Financed	
		From Earnings	From New Issues
Railway equipment	2	7	93
Machinery manufacturing	43	84	16
Electrical equipment	33	100	-0-
Rubber manufacturing	39	44	56
Iron and steel	28	51	49
Iron and steel excluding United States Steel Corp.	21	14	86
Chrysler Corp. & General Motors Corp.	36	75	25
Other automobile manufacturing	45	100	-0-
Automobile equipment	36	100	-0-
Chemical producing	28	55	45
Metal container	47	78	22
Food processing	35	67	33
Retail merchandising	55	94	6
Major tobacco	29	89	11
Other tobacco and beverage	36	100	-0-

It will be noted that new capital issues provided a small fraction of the financial requirements for growth in the rapidly expanding industries, and that industries with highest ratios of new capital compared to growth from profits in the prosperous twenties are those which were already overexpanded. Railway equipments, rubber, and iron and steel manufacturers had more new capital than retained income. The first two industries hardly enjoyed a decade which can be called prosperous, while steel companies perhaps require capital commitments in too large units to be financed easily from earnings.

Net Income Retained, 1922-33

Thus far we have examined corporate financing for growth during the profitable twenties and the record shows reinvested earnings as the principal source of capital and that practically all companies which were really profitable retained a substantial portion of income produced during the good years. If the period of time is extended three years, through 1933 for most companies, the percentage of total income retained throughout the complete cycle is much less, as demonstrated in Table 8.

TABLE 8—CLASSIFICATION OF COMPANIES BY PERCENTAGE OF EARNINGS RETAINED, 1922-33

Per Cent Income Retained	Number of Companies
Losses.....	9
0-20.....	22
21-30.....	18
31-40.....	15
More than 41.....	8

There were only eight companies, or 11 per cent of the group, which retained more than 41 per cent of total income over the complete cycle, while 70 per cent of the companies retained less than one-third of total income. Twelve per cent of these enterprises actually lost part of their 1922 original capital during the twelve year period. However, over the complete cycle, twenty-seven of the seventy-two companies retained earnings which increased assets invested more than 50 per cent in spite of the severe depression.

Table 9 summarizes by industry the financial history of each company showing the total income, retained earnings, new stock and bond financing, and extent of reinvested earnings during the 1922-33 cycle. All factors discussed in this chapter are assembled for each company in the sample in the complete summary table on page 42.⁸

⁸ The years of prosperity and depression are not the same for all companies. In order to facilitate discussion and comparison, Tables 4, 5, and 7 are based upon the period 1922-30. Where individual company experiences are emphasized the years of most profitable and least profitable operations for each company are used. This difference in prosperity and depression periods accounts for differences in figures in the various tables. In Table 9 and elsewhere the periods are: railway equipment, glass production, electrical equipment, auto equipment, chemical, metal containers, and foods, 1922-30, 1931-33; machinery manufacturing and iron and steel, 1922-30, 1931-34; Chrysler Corporation, 1922-29, 1930-32; General Motors, 1922-30, 1931-33; Packard, 1922-30, 1931-34; other automobile companies, 1922-29, 1930-34; tire and rubber, 1922-29, 1930-33; J. C. Penney, 1922-29, 1930-32; May Department Stores, 1922-30, 1931-32; other merchandisers, 1922-30, 1931-33; major tobaccos, 1922-32, 1933-36; miscellaneous tobacco and beverage companies, 1922-31, 1932-34.

TABLE 9—CORPORATE EXPANSION AND LIQUIDATION THROUGH PROSPERITY AND DEPRESSION
(Amounts in thousands of dollars)

Industry	Growth of Corporate Assets, Profitable Period						Income after Depreciation Period			Per Cent of Prosperity Retained Earnings
	Retained Earnings			New Capital			Dividends			
	Total Earnings Prosperity Period	Amount	Per Cent of Total Earnings	Per Cent of 1921 Assets	Stocks	Bonds	Total	Per Cent Growth Financed		
Railway equipment										
American Brake Shoe & Foundry Co.	\$ 25,158	\$ 9,886	39	45	\$ 1,195	\$ 34	\$ 1,229	11	\$ 1,790	18
American Car and Foundry Co.	47,796	3,504	0	-3	-0	-0	-0	-0	-1,311	-0
American Locomotive Co.	48,700	-15,133	-0	-18	41,167	-1,912	39,255	-10	-15,656	-0
Baldwin Locomotive Works	41,267	7,231	18	9	10,753	18,912	19,487	-10	-1,525	-0
Lima Locomotive Works, Inc.	6,869	1,911	28	16	2,873	2,873	31	-3	-1,337	-0
New York Air Brake Co.	13,078	3,981	30	28	-	-3,001	-2,694	-0	-1,221	-0
Total	\$ 182,868	\$ 4,372	2	1	\$ 46,617	\$ 12,034	\$ 58,650	93	\$ 44,904	-0
Machinery										
Allis-Chalmers Manufacturing Co.	\$ 32,149	\$ 7,084	22	13	49	\$ 6,463	\$ 13,893	\$ 7,440	\$ 51	\$ 7,608
J. I. Case Co.	24,455	12,447	52	43	66	7,043	7,043	16	-8,058	165
Chicago Pneumatic Tool Co.	5,945	3,444	33	37	9,133	-0	7,043	35	-8,058	-23
Deere & Co., Pneumatic Tool Co.	5,945	3,444	33	37	9,133	-0	7,043	35	-8,058	-24
Fairbanks, Morse & Co.	26,088	8,888	53	34	20,398	-10,057	16,668	-10	-15,933	30
International Harvester Co.	18,621	8,182	35	35	20,786	-7,078	15,680	-42	-15,933	47
National Accurate Co.	5,105	2,105	53	35	8,811	-1,802	18,888	19	-6,251	79
Oil Filterator Corp.	5,665	2,061	53	98	10,000	-0	-3,131	-5	-9,485	60
Washington Pump & Machinery Corp.	10,892	1,938	18	6	100	1,786	-1,500	-5	-2,261	13
Total	\$ 39,297	\$ 69,900	43	32	\$ 87	\$ 1,400	-1,486	-0	-5,860	302
Glass products										
Owens-Illinois Glass Co.	\$ 38,613	\$ 11,351	29	35	61	\$ 2,546	\$ 4,800	\$ 7,346	39	\$ 3,771
Pittsburgh Plate Glass Co.	99,978	34,316	34	56	97	\$ 950	\$ 0	\$ 959	3	-197
Total	\$ 138,591	\$ 45,667	33	49	\$ 85	\$ 3,505	\$ 4,800	\$ 8,305	15	\$ 3,574
Electrical Equipment										
General Electric Co.	\$ 423,593	\$ 130,432	31	44	100	\$ 8,094	\$ -35,958	\$ -27,864	-29	\$ -36,926
Westinghouse Electric Mfg. Co.	160,486	62,448	39	40	71	61,725	\$ -36,249	25,476	29	\$ -38,770
Total	\$ 584,079	\$ 192,890	33	43	100	\$ 69,819	\$ 72,207	\$ -2,388	-0	\$ -71,502
Textile and rubber										
Flemont Tire & Rubber Co.	\$ 74,803	\$ 43,221	58	103	36	\$ 53,403	\$ 22,718	\$ 76,121	64	\$ -5,418
F. G. Goodyear Co.	76,729	22,775	30	27	41	26,915	6,227	33,192	59	\$ -2,231
Goodyear Tire & Rubber Co.	127,184	50,099	39	32	58	6,161	30,165	36,326	61	\$ -1,023
United States Rubber Co.	113,816	36,344	32	13	74	17,735	4,638	13,097	26	\$ -2,563
Total	\$ 392,532	\$ 152,439	39	27	\$ 49	\$ 104,214	\$ 54,522	\$ 158,736	51	\$ -65,235

CORPORATE PROFITS

43

TABLE 9—Continued

Industry	Growth of Corporate Assets, Profitable Period						Income after Dividends Depression Period Per Cent of Proprietary Period Retained Earnings	
	Retained Earnings			New Capital				
	Total Earnings Profitable Period	Amount	Per Cent of Total Earnings	Per Cent of 1921 Assets	Stocks	Bonds	Total	Per Cent of Growth Financed
Iron and steel								
Bethlehem Steel Co.	\$ 263,526	\$ 58,289	22	17	18	\$ 281,324	\$ 260,887	82
Crucible Steel Co. of America	44,316	2,463	6	32	47	7,601	5,126	68
Gulf States Steel Corp.	2,452	2,466	29	16	5,634	5,386	1,020	32
Inland Steel Co.	64,148	22,198	35	46	42	7,025	3,039	58
Republic Steel Corp.	43,385	5,424	12	5	131,063	48,206	185,259	97
United States Steel Corp.	1,090,197	332,577	31	15	100	237,398	-41,336	20,058
Wheeling Steel Corp.	50,197	10,980	22	13	27	4,635	24,480	29,115
Total, excluding U. S. Steel Corp.	\$ 1,365,323	\$ 434,406	28	15	58	\$ 670,504	\$ 353,081	42
Automobile								
Chrysler Corp.	474,546	101,829	21	15	16	433,206	88,275	521,481
General Motors Corp.	1,112,469	\$ 65,935	59	117	52	\$ 21,938	\$ 38,421	48
Hudson Motor Car Co.	1,351,864	465,379	34	119	80	85,443	26,330	114,773
Macneal-Schwendler Corp.	89,685	26,071	52	393	100	8,159	-10,159	-10
May-Tag Corp.	53,982	20,442	47	383	100	8,166	2,163	10,520
Nash-Kelvinator Corp.	12,728	5,675	44	298	100	-20,350	-6,269	30
Packard Motor Car Co.	11,9872	49,336	34	74	100	-14,834	-5,854	-20,349
Reo Motor Car Co.	31,830	13,401	41	78	100	-344	-0	-12,163
Total	\$ 1,886,986	\$ 712,839	38	139	100	\$ 80,328	\$ 60,060	\$ 140,388
Auto equipment								
Electric Storage Battery Co.	\$ 57,547	\$ 10,599	18	27	89	\$ 1,357	\$ 1,357	11
Motor Wheel Corp.	16,831	5,893	35	66	100	-7,153	-7,153	-7
Miller Manufacturing Corp.	2,982	1,937	65	57	50	1,107	-6,604	50
Spicer Manufacturing Corp.	11,156	9,774	88	40	207	100	-1,941	-1,941
Timken Roller Bearing Co.	83,152	34,443	40	76	100	-496	-2,604	-3,100
Total	\$ 171,674	\$ 62,646	36	76	100	\$ -496	\$ -2,604	\$ -3,100
Chemical								
Air Reduction Company, Inc.	\$ 26,031	\$ 10,917	42	114	45	\$ 14,964	\$ 1,419	13,585
Allied Chemical & Dye Corp.	204,294	\$ 20,018	40	42	100	376	-8,769	-8,393
American Cyanamid & Chemical Corp.	16,191	5,858	36	36	19	17,730	6,683	24,423
Commercial Solvents Corp.	16,178	6,265	39	23	69	35,619	-772	81
E. I. du Pont de Nemours & Co.	364,585	54,436	15	75	37	132,211	-38,442	2,877
Matheson, Alitali & Co., Inc.	14,436	7,904	55	75	71	3,193	-93,769	63
Union Carbide & Carbon Corp.	215,838	70,075	33	37	52	63,617	1,632	65,249
Total	\$ 857,553	\$ 237,367	28	36	54	\$ 235,740	\$ 41,110	\$ 194,630

Retained Earnings
as a Per
Cent of
Total
Earnings
1922-33

Income after
Dividends
Depression Period
Per Cent of
Proprietary
Period Retained
Earnings

\$ -44,048
-8,098
-1,513
-2,360
-26,456
-21,638
-9,668

76
329
14
11
49
64
88

\$ -40,486
-8,098
-1,513
-2,360
-26,456
-21,638
-9,668

45
35
25
18
46
50
94

\$ -29,418
-5,826
-12,850
-1,286
-20,349
-30
-20,349

45
35
32
36
50
50
94

\$ -202,366
-202,366
-202,366
-202,366
-202,366
-202,366
-202,366

29
24
24
24
24
24
24

\$ -1,974
-2,476
-4,400
-3,200
-6,772
-20,349
-3,927

19
42
21
33
20
50
6

\$ -162
-5,217
-1,941
-3,359
-5,203
-10
-454

1
31
47
47
10
42
26

\$ -11,494
\$ -11,494
\$ -11,494

TABLE 9—Continued

Industry	Growth of Corporate Assets, Profitable Period										Income after Depression Period Dividends	Per Cent of Prosperity Period Retained Earnings	Retained Earnings as a Per Cent of Total Earnings 1922-33			
	New Capital					Income after Depression Period										
	Retained Earnings	Per Cent of Total Earnings	Per Cent of 1921 Assets	Stocks	Bonds	Total	Per Cent of Growth Financed	Amount	Per Cent of Prosperity Period Retained Earnings							
Total Earnings Prosperity Period	Total															
Metal container American Can Co. Continental Can Company, Inc.	\$ 142,766 45,893	\$ 65,441 24,491	46 50	51 108	100 41	\$ 35,452 \$ 35,452	\$ 0- \$ 0-	\$ 9,656 \$ 35,452	0- 59	\$ 1,023 6,115	-0- -0-	36 45	36 45			
Total	\$ 191,859	\$ 89,932	47	60	78					\$ 7,318		39				
Food processing																
California Co. Packing Corp. Corn Products Refining Co. Hershey Chocolate Corp. Lace-Wiles Biscuit Co. National Biscuit Co. Pillsbury Flour Mills Co. Quaker Oats Co.	\$ 89,356 46,947 107,344 54,321 15,447 14,720 22,557	\$ 44,845 16,433 27,798 37,112 7,494 2,406 3,886	50 35 26 68 49 17 37	104 47 21 121 100 54 38	92 1,385 1,289 1,519 9,349 645 653 571	\$ 81,095 -16,464 -16,464 20,133 20,133 13,811 13,811	\$ 0- -9,656 -9,656	\$ 82,006 -25,813 -25,813 15,298 15,298 6,103 6,103	65 0- 0- 45 45 62 62	\$ 2,913 -14,257 -14,257 2,482 2,482 -1,990 -1,990	6 90 90 0- 0- 7 7	36 4 20 56 39 12 27	36 4 20 56 39 12 27			
Total	\$ 537,795	\$ 187,614	35	50	67	\$ 94,654	\$ 0- \$ 0-	\$ 670 \$ 670	\$ 93,984 \$ 93,984	33	\$ 15,781	8	25			
Merchandising																
Hart, Schaffner & Marx S. S. Kresge Co. M.W. Department Stores Co. F.C. Penney Co. Sears, Roebuck & Co. F.W. Woolworth Co.	\$ 19,299 104,322 54,360 60,825 170,483 255,634	\$ 9,592 64,005 23,892 36,617 106,938 125,534	50 59 44 59 60 53	44 228 75 74 71 85	100 8,183 8,183 20,465 13,77 3,297 9,528	\$ 3,161 2,005 19,590 0- 13,77 -33,690 -1,524	\$ 0- 0- 0- 0- 0- 0- 0-	\$ 3,161 21,595 21,595 8,183 8,183 -33,690 -8,007	0- 25 25 26 36 0- 0-	\$ 6,663 -5,50 -5,50 1,182 1,182 -8,266 -2,850	92 0- 0- 37 37 15 3	7 51 51 38 38 37 33	7 51 51 38 38 37 33			
Total	\$ 666,923	\$ 166,668	55	106	99	\$ 17,434	\$ 12,049	\$ 5,385	1	\$ 21,787	8	44				
Major tobacco																
American Tobacco Co. Lipsett & Myers Tobacco Co. R.J. Reynolds Tobacco Co.	\$ 316,291 213,256 314,562	\$ 74,731 65,164 88,882	24 31 28	41 58 96	100 66 100	\$ 50,343 34,408 -38,329	\$ 14,082 -1,393 0-	\$ 36,261 33,015 -38,329	33 34 0-	\$ 19,216 2,883 -29,164	26 0- 33	14 25 15	14 25 15			
Total	\$ 844,109	\$ 228,737	27	59	89	\$ 46,422	\$ 15,475	\$ 30,947	11	\$ 45,497	20	16				
Miscellaneous																
Coca-Cola Co. Consolidated Clear Corp. General Clear Company, Inc. Wm. Wrigley, Jr. Co.	\$ 92,559 28,668 34,239 94,898	\$ 37,335 24 31 37	40 24 31 37	117 91 29 137	100 91 75 98	\$ 25,392 16,205 7,720 -667	\$ 82 338 16,543 1,248	\$ 25,474 -21,249 71 5,821	0- 0- 71 581	\$ 8,907 -2,449 71 581	0- 0- 35,220 2	36 4 49 31	36 4 49 31			
Total	\$ 250,564	\$ 89,467	36	88	100	\$ 9,134	\$ 4,304	\$ 4,304	0- <td>\$ 5,427</td> <td>0-<td></td><td>30</td></td>	\$ 5,427	0- <td></td> <td>30</td>		30			

CHAPTER 3

PROSPERITY EARNINGS AND DEPRESSION DIVIDENDS

Asset structure and economic activity of companies in the twelve industries differ greatly as already pointed out but in Chapter 2 it is demonstrated that the practice of retaining earnings is not peculiar to any industry. On the contrary, we see that reinvesting income is a policy of the individual companies and that in widely varying degree all the profitable companies in all the industries withheld income.

The purpose of this chapter is to determine whether ability to pay depression dividends was dependent upon the extent of 1922-30 profits retained, and to measure the amount of depression dividends paid from surplus accumulated during the twenties.

In determining the amount of depression dividends paid from reinvested prosperity earnings it is important to differentiate between reported income or loss and actual funds resulting from operations that affect dividend paying capacity, especially during the depression years. Write-downs of plant, security values, inventory, developmental costs, and intangible assets may represent long term business expenses, but the write-down as such in no way dissipates physical properties or liquid assets which could be used to meet current operating costs or dividend requirements even though such charges reduce the surplus balance. Appendix II explains the technique used to measure the profits retained during the twenties and the amount of depression dividends paid from these reinvested profits.¹

Measurement of Dividend Performances

Very few corporations pay a consistent and uniform dividend rate to common stockholders and it is therefore difficult to

¹ A thorough discussion of the nature and theory of surplus adjustments along with a number of historical records is presented by W. A. Hosmer of Harvard University in an article "The Effect of Direct Charges to Surplus on the Measurement of Income," *Business and Modern Society*, edited by Malcolm P. McNair (Harvard University Press, 1938).

describe the magnitude of a dividend reduction or increase from prosperity to depression. However, if dividends of \$30,000 were paid in 1930 and \$15,000 in 1931, there would be little hesitancy in saying the cut was 50 per cent. Over a much longer period of time capital structures may change in many diverse ways, such as through stock dividends, stock splits, new issues and retirements, and in addition the growth factor must be considered. For all practical purposes of portraying a relationship the rate of dividend cut can be computed for a period of years in the same manner as suggested for two specific years. Dividends paid by each company in 1927, 1928, 1929, and 1930 were added and divided by the number of years to provide the average annual dividend paid during the best years. Total dividends paid through depression years were divided by the number of years considered to be the worst of the poor years for each company, usually 1931-33, in order to arrive at average depression dividends.

Twenty-Five Per Cent of Companies with Best 1931-33 Dividend Record

A simple way to discover the amount of dividends paid from rainy day reserves is to divide the companies into groups based upon dividend maintenance during the poorest years. Table 10 presents in condensed summary the income and dividend records of nineteen companies that have the best depression dividend records since they actually increased the cash payments to common stockholders. It is very clear that corporations with the best depression dividend records operated profitably through the poorest years and in most cases found it unnecessary to draw upon the surplus.

There is nothing unusual about the portion of prosperity earnings retained by these companies that increased dividend payments during the poorest years. Each enterprise retained and reinvested part of the profits, but generous depression dividends were paid because these companies had no depression. There are three exceptions where dividends were paid materially in excess of reported income.²

² It is necessary at all times to recognize the distinction between accrued income or loss and funds made available from operations. Retained earnings are not held in liquid funds for the expressed purpose of meeting financial reverses,

CORPORATE PROFITS

47

TABLE 10—COMPARISON OF PROSPERITY EARNINGS RETAINED WITH DEPRESSION DIVIDENDS PAID
Nineteen Companies that Increased Common Dividend Payments during Depression Years
(Amounts in thousands of dollars)

Company	Earnings Retained in Prosperity Period				Income and Dividends in Depression Period				Depression Dividends as a Per Cent of Earnings Retained in Prosperity Period		
	Per Cent of Dividend Increase	Amount	Per Cent of Total Net Income	Per Cent of Earnings Available to Common Stock	Reported Income after Interest	Adjusted Income after Interest	Preferred and Common Dividends	Reported	Excess of Dividends over Income		
									Reported	Adjusted	
Hershey Chocolate Corp.	208.0	\$ 37,172	68	87	\$ 16,620	\$ 17,024	\$ 14,138	-\$ 0-	\$ 0-	-\$ 0-	103.9
General Cigar Company, Inc.	77.0	10,473	31	41	5,114	6,297	10,212	\$ 5,098	\$ 3,915	48.7	37.4
F. W. Woolworth Co.	54.5	125,534	30	66	63,450	75,316	66,300	2,850	2,3	0-	38.3
Loose-Wiles Biscuit Co.	37.1	7,494	49	66	5,332	5,779	4,815	0-	0-	0-	17.3
Coca-Cola Co.	34.3	37,335	40	45	35,880	29,346	26,973	0-	0-	0-	58.1
Borden Co.	31.8	44,845	50	59	28,259	37,400	31,172	2,913	0-	0-	19.0
Air Reduction Company, Inc.	20.5	10,918	42	42	9,302	12,780	9,465	1,63	6.5	0-	28.0
C. Penney Co.	19.6	36,615	60	65	22,266	23,117	21,804	5,518	4,667	15.1	12.7
Fallsburg Flour Mills Co.	19.5	8,386	37	66	3,946	6,386	2,663	0-	0-	0-	9.8
Liggett & Myers Tobacco Co.	16.6	65,164	31	37	71,881	78,286	75,001	0-	0-	0-	44.0
Continental Can Company, Inc.	12.7	24,491	50	53	18,037	17,925	11,922	0-	0-	0-	15.0
American Can Co.	12.5	65,442	46	57	41,844	41,405	40,821	0-	0-	0-	22.1
Matheron Alkali Works, Inc.	12.4	7,904	55	63	3,348	3,891	3,802	454	5.7	0-	18.2
S. S. K. F. Co.	6.6	64,096	59	61	15,012	19,013	15,163	151	0-	0-	14.0
Allied Chemical & Dye Corp.	6.2	82,019	40	46	44,968	59,934	55,185	5,217	6.4	0-	18.4
R. J. Reynolds Tobacco Co.	3.9	88,862	28	29	90,886	91,446	120,000	29,164	28,534	0-	28.8
Quaker Oats Co.	3.7	21,370	36	44	15,582	18,159	16,560	978	4.6	0-	28.4
Wm. Wrigley, Jr. Co.	1.5	34,839	37	37	22,479	22,054	20,612	0-	0-	0-	35.9
Commercial Solvents Corp.	0.4	6,265	39	42	5,728	5,808	5,598	0-	0-	0-	59.6
Totals		\$779,224	42	46	\$25,944	\$71,396	\$553,206	\$52,506	\$37,116		

General Cigar retained only 31 per cent of the prosperity period earnings but increased common dividend payments 77 per cent during the poorest years. The following summary reveals the extent of depression dividends paid from surplus:

	<i>Reported</i>	<i>Adjusted</i>
Retained earnings, 1922-31	\$10,473,000	\$10,449,000
Dividends in excess of earnings, 1932-34	5,098,000	3,915,000
Balance retained	\$ 5,375,000	\$ 6,534,000

The J. C. Penney Company paid a limited amount of dividends from surplus which deserves explanation. For eight years, 1922-29, the company reinvested 60 per cent of the total net income and in 1930 paid dividends equal to the amount paid in the three year period before or after this date. Earnings of 1930 were slightly more than one-half the dividends paid, but retained income in the year 1929 alone would supply the deficiency.

The R. J. Reynolds company retained 28 per cent of the 1922-32 profits and for the four years 1933-36 maintained dividend payments at the previously established rate. Earnings declined sharply and dividends paid include an appreciable portion of profits withheld in the better years as shown in the following summary:

	<i>Reported</i>	<i>Adjusted</i>
Retained earnings, 1922-32	\$88,862,000	\$101,938,000
Dividends in excess of earnings, 1933-36	29,164,000	28,534,000
Balance available	\$59,698,000	\$ 73,404,000

but are generally invested in expanding volume of business. When demand for the output falls off, prices are likely to be reduced in an effort to encourage more sales or production reduced in order to maintain prices. If sales prices are sufficiently low the peak volume of production can usually be maintained. With sales prices below the cost of production the revenue may be entirely adequate to maintain interest and dividends until the assets (inventories, supplies, and plant facilities) used in production are consumed. This type of reserve can be utilized to provide funds during poor years, but it is precisely what the business enterprise hopes to avoid. Adjusted figures showing the cash results of operation are included in the table to indicate the extent to which depression distributions were made from current operations even though reported earning figures may indicate a decidedly different result based upon accrual accounting.

There is little to indicate that these nineteen companies were able to pay generous depression dividends because they retained earnings during the twenties. They retained no more of the prosperity period income than many other companies that did not continue dividends, and the dividends of the early thirties were not paid extensively from surplus but came from current profits. General Cigar and R. J. Reynolds drew rather heavily against surplus for depression dividends but they retained a relatively small portion of prosperity profits and increased dividends in spite of their generous dividend policies of the twenties.

Thirty-Three Per Cent of Companies that Reduced Dividends Less than 65 Per Cent

It would not be at all necessary to maintain dividends in full during the poorest years in order to justify the practice of retaining earnings in the good years and the stockholder might feel amply rewarded for his forbearance if during poor years he should receive 40 or 50 per cent of his regular dividend. In our sample there are twenty-four companies, one-third of the group, that reduced dividends during the poorest years less than 65 per cent based upon rates of the late twenties. These companies paid \$983,635,000 in depression dividends and we are greatly interested to know what portion of the 1922-30 earnings these concerns retained and to what extent the depression dividends came from accumulated surplus. Table 11 presents these companies ranked in order of dividend maintenance and shows the amount of earnings retained during the twenties and the extent to which depression dividends depended upon these reinvested profits.

It should be noted that only six of the enterprises reported losses and that only in the cases of Westinghouse and California Packing was the reported loss of considerable magnitude. The data demonstrate that practically all of the corporations which maintained dividends through the depression were able to operate profitably during the poorest years. Nevertheless, several companies in this group paid dividends substantially in excess of current earnings and we shall examine these instances in greater detail.

TABLE 11—COMPARISON OF PROSPERITY EARNINGS RETAINED WITH DEPRESSION DIVIDENDS PAID
 Twenty-Four Companies that Reduced Common Dividends Less than 65 Per Cent
 (Amounts in thousands of dollars)

Company	Earnings Retained in Prosperity Period				Income and Dividends in Depression Period				Depression Dividends as a Per Cent of 1930 Assets	
	Per Cent of Dividend Reduction	Amount	Per Cent of Earnings Available to Common Stock	Reported Income after Interest	Adjusted Income after Interest	Preferred and Common Dividends	Reported	Adjusted	Reported	Adjusted
									Reported	Adjusted
National Biscuit Co.	2.3	\$ 24,206	17	\$ 51,837	\$ 53,677	\$ 1,790	\$ 1,313	7.9	5.4	41.2
Owens-Illinois Glass Co.	7.0	11,351	29	33	11,659	24,001	7,888	0	0	11.6
Corn Products Refining Co.	7.5	27,708	30	30	30,977	28,104	30,642	-0	2,538	25.3
American Tobacco Co.	12.7	74,731	24	27	87,078	87,968	106,294	19,216	18,330	36.6
Goodyear Tire & Rubber Co.	13.7	50,069	39	90	15,236	21,444	28,259	13,023	8,815	13.2
Sears, Roebuck & Co.	16.0	106,938	63	63	9,622	9,622	18,522	8,626	8,450	9.1
General Electric Co.	18.4	130,434	31	33	68,791	72,416	107,717	38,926	35,301	27.1
Union Carbide & Carbon Corp.	21.5	70,031	33	34	42,594	39,681	46,521	12,927	6,840	16.2
E. I. du Pont de Nemours & Co.	21.5	54,331	15	17	118,319	126,917	123,524	5,205	0	0
Otis Elevator Co.	32.5	25,062	49	52	655	2,943	11,709	11,034	9,666	9.6
Chrysler Corp.	34.2	63,955	59	62	-9,551	6,420	19,869	29,440	13,449	44.1
International Harvester Co.	37.7	81,882	44	57	-4,774	-4,307	45,312	49,486	49,619	60.5
American Brake Shoe & Foundry Co.	38.8	9,886	39	52	2,629	3,883	4,419	1,790	934	9.4
May Department Stores Co.	39.1	23,891	44	46	3,145	3,732	4,927	1,782	1,195	5.0
Firestone Tire & Rubber Co.	43.7	43,221	58	74	15,119	13,112	20,537	5,418	7,425	17.2
Watsonhouse Electric Manufacturing Co.	44.4	62,458	39	44	-21,196	-16,128	17,380	38,516	34,108	54.6
Timken Roller Bearing Co.	45.0	34,443	40	40	4,261	8,776	11,033	6,772	2,257	7.5
General Motor Corp.	45.9	465,378	34	36	180,256	269,990	266,080	85,824	19,7	6.6
Pittsburgh Plate Glass Co.	50.4	34,316	34	36	7,235	8,481	7,333	1,198	0	0
California Packing Corp.	58.1	16,443	35	35	9,787	-7,877	4,887	14,747	12,665	89.8
Nash-Kelvinator Corp.	58.6	56,575	44	46	10,625	16,454	31,064	20,439	14,610	56.3
Lima Locomotive Works, Inc.	59.5	1,911	28	28	-2,952	-3,086	385	3,337	3,471	181.6
Electric Storage Battery Co.	61.4	10,559	18	18	6,082	7,760	8,026	1,974	3,366	2.6
Mack Trucks, Inc.	64.0	24,441	47	47	-3,435	-1,313	7,850	11,225	9,163	37.5
Totals		\$1,506,254	34	38	\$614,492	\$776,608	\$983,635	\$372,825	\$231,585	20.7

American Tobacco has for many years been a generous dividend payer, disbursing 73 per cent of the available income from 1922 through 1932. Each year since 1932 earnings have been inadequate to meet the established dividend requirements and stockholders have received a portion of the retained income as shown in the following summary:

	<i>Reported</i>	<i>Adjusted</i>
Earnings retained, 1922-32	\$74,731,000	\$73,906,000
Dividends in excess of earnings, 1933-36	19,216,000	18,330,000
Balance retained	\$55,515,000	\$55,576,000

Sears Roebuck is sometimes used to illustrate the practice of paying dividends in poor years from surplus accumulated during good years, and it is true that this company did pay almost ten millions in cash dividends in excess of the depression income. Dividends paid in 1931 were earned in full, but in 1932 one-half the regular rate was paid in the face of operating losses. The summary emphasizes that a very small part of the prosperity retained earnings was used to pay depression dividends. If the stockholder must forego almost two-thirds of his income during seven fat years in order to receive one-half that rate in one lean year, possibly the price of the depression dividend is too great.

	<i>Reported</i>	<i>Adjusted</i>
Retained earnings, 1922-30	\$106,939,000	\$107,008,000
Dividends in excess of earnings, 1931-32	8,626,000	8,430,000
Balance retained	\$ 98,313,000	\$ 98,578,000

Manufacture of electrical equipment is concentrated largely in the plants of two huge corporations and the product consists of heavy machinery and durable consumer goods. In nine prosperous years of the twenties General Electric paid \$265,362,000 to common stockholders (counting \$20,669,000 book value of Electric Bond & Share stock as cash equivalent) and reported \$130,434,000 as retained. If reported figures are accepted as

final, only one-third of the earnings were retained but reserves for general contingencies increased nearly \$30,000,000 and profit on sale of securities was \$15,000,000. In addition to earnings retained, depreciation charges of \$20,669,000 were not expended for plant maintenance and this additional amount became available for other corporate uses. After all adjustments the stockholders received 56 cents of each dollar made available through operations and the company reinvested 44 cents.

General Electric did not report an operating loss at any time but profits after 1930 were substantially reduced. Dividends during four years of the depression were maintained at 82 per cent of the prosperity level counting as cash \$26,440,000 of Radio Corporation of America common stock distributed under consent decree. Common stockholders received \$38,926,000 in cash dividends which were not earned during the depression. When one recalls that \$208,019,000 was withheld in the twenties the dividends in excess of earnings do not appear overly impressive. The box score is as follows:

	<i>Reported</i>	<i>Adjusted</i>
Retained earnings, 1922-30	\$130,434,000	\$208,019,000
Dividends in excess of earnings, 1931-33	38,926,000*	35,301,000*
	<hr/>	<hr/>
Balance retained	\$ 91,508,000	\$172,718,000

*Includes \$7,725,000 preferred dividends and \$1,157,000 interest.

Westinghouse Electric and Manufacturing Company retained 44 per cent of earnings available to stockholders during the prosperous decade (39 per cent of total net income) and suffered severe operating losses from 1931 to 1934. In spite of these losses, dividends were maintained equal to 56 per cent of boom period distribution. Retained funds of \$58,104,000 were drawn upon for \$17,380,000 to pay dividends during the early thirties and stockholders thereby received 30 per cent of the cash income previously withheld. Among the manufacturers of durable and capital goods Westinghouse is unique in its 1931-33 record. In spite of severe losses, substantial dividends were

paid, and as a result 62 per cent of the surplus created in nine good years was absorbed by losses and dividends during three poor years. This company paid relatively generous dividends during the twenties and still was able to make unusual dividend payments in the poorest years. The summary is as follows:

	<i>Reported</i>	<i>Adjusted</i>
Retained earnings, 1922-30	\$62,458,000	\$58,104,000
Losses, 1931-33	21,197,000	16,728,000
Preferred dividends, 1931-33	737,000	737,000
Common dividends, 1931-33	16,643,000	16,643,000
	<hr/>	<hr/>
Balance retained	\$23,881,000	\$23,996,000

Two of the equipment manufacturers paid depression dividends approaching the regular rates established during the twenties. International Harvester and Otis Elevator each reported very small depression losses but each had retained a substantial portion of the prosperity profits. International Harvester is one of the largest companies in this sample and the record deserves emphasis because International Harvester is one of the noted corporations that paid dividends throughout the depression. Forty-four per cent of reported net income was retained during the good years. Common stockholders saw 57 per cent of reported earnings available for dividends reinvested and when adjustments are made for increases in surplus reserves the stockholder received one-third of the income actually available for dividends. Substantial operating loss was sustained in 1932 but stockholders received dividends at 58 per cent of the former rate. In total, common stockholders received 18 per cent of the income withheld in nine profitable years and only two-thirds of the amount retained in 1929 and 1930. When boiled down to bare facts the common stockholder may read the following box score:

	<i>Reported</i>	<i>Adjusted</i>
Total net income reported, 1922-30	\$186,211,000	\$186,211,000
Surplus reserve increase	12,276,000	
Secret reserve increase	31,000,000	
	<hr/>	<hr/>
Total available, 1922-30	\$229,487,000	

Preferred Dividends, 1922-30..	42,564,000	42,564,000
Available to common	\$143,647,000	\$186,923,000
Common dividends	61,815,000	61,815,000
Retained earnings	\$ 81,832,000	\$125,108,000
Losses, 1931-34	4,174,000	4,307,000
Balance available	\$ 77,658,000	\$120,801,000
Preferred dividends, 1931-34 ..	22,900,000	22,900,000
Common dividends, 1931-34....	22,412,000	22,412,000
Balance retained	\$ 32,346,000	\$ 75,489,000

International Harvester operated at a loss only in 1932 and unexpended depreciation represents at least one-third of the reported loss. Even if we combine all preferred and common depression dividends in excess of funds produced, stockholders received only 36 cents of each dollar withheld during the twenties.

Otis Elevator paid dividends each of the depression years and stockholders received during the poorest years 68 per cent of their regular dividends. In better times the company retained fully one-half the total earnings. During the "years of the locust" minor operating losses were reported but depreciation charges continued while plant expenditures were negligible, indicating that funds from operations were an important factor in making dividend payments. Earnings withheld over a period of nine years aggregate \$25,062,000 and \$11,054,000 of the amount was later disbursed which is 44 per cent of the reported earnings withheld.

The summary:

	Reported	Adjusted
Retained earnings, 1922-30.....	\$25,062,000	\$24,945,000
Preferred dividends in excess of earnings, 1931-34	905,000	-0-
Common dividends in excess of earnings, 1931-34	10,149,000	8,766,000
Balance retained	\$14,008,000	\$16,179,000

American Brake Shoe and Foundry is the only railway equipment company included which even approached consistency in maintaining dividends through the depression and this accomplishment can be accounted for through two contributing factors. Unlike other companies in the industry, no operating losses occurred during the depression years, and in addition, 51½ per cent of prosperity earnings available for dividends (39 per cent of total income) was withheld. It is very impressive to say the company paid four times as much in dividends as was earned during the three depression years and there is no intent here to minimize the accomplishment, but in round numbers and summary form the record shows:

	<i>Reported</i>	<i>Adjusted</i>
Retained earnings, 1922-30	\$9,886,000	\$9,828,000
Dividends in excess of earnings, 1931-34	1,790,000	934,000
Balance retained	\$8,096,000	\$8,894,000

In this group of companies that maintained dividends we find a number of motor car manufacturers. The Chrysler Corporation as such did not exist until 1925 and in order to make the data comparable the Maxwell figures are used before 1925 because in the beginning Chrysler was nothing more than the reorganized Maxwell Motor Car Company. Chrysler earnings in 1930 were at a low point while dividends greatly exceeded earnings and this condition continued until 1933. In the very profitable years before 1930 Chrysler retained 62 per cent of earnings available to common stockholders and 59 per cent of total net income. When the bad years came, dividends were maintained at 65 per cent of the boom year levels. During three of the poorest years in automobile history Chrysler stockholders received 30 per cent of the profits withheld during the twenties. The Chrysler record of remarkable dividend payments through the depression adds emphasis to the prerequisites already suggested for such disbursements. Fifty-nine per cent of the 1922-29 total net income was retained. No loss of funds occurred through operations during the worst years (since

unexpended depreciation is more than reported losses), and not more than 30 per cent of formerly retained earnings was disbursed. It may be significant to observe that 1936 Chrysler dividends were equal in amount to two-thirds of all dividends paid over the fourteen year period 1922-35 and is identical with the total dividends paid in the five year boom period 1926-30.

	<i>Reported</i>	<i>Adjusted</i>
Retained earnings, 1922-29	\$65,935,000	\$73,939,000
Common dividends in excess of earnings, 1930-32	19,869,000	13,449,000
Balance available	\$46,066,000	\$60,490,000
Losses, 1930-32	9,551,000	-0-
Balance retained	\$36,515,000	\$60,490,000

General Motors Corporation, second largest of the seventy-two companies included in this sample, earned more than \$1,250,000,000 available for common dividends in the nine years 1922-30 and stockholders received regularly an average of 65 per cent of the annual earnings. Through the three worst years of the depression dividends were reduced 46 per cent. From each of the 469,034,000 prosperity dollars retained, stockholders received during the "rainy days" 18.3 cents. Approximately one-third of the dividends paid were in excess of reported income. All funds necessary for those disbursements came from operations since unexpended depreciation added to reported income exceeds cash dividends distributed. Once again it is demonstrated that a small part of profits withheld in good years reached stockholders during the thirties and that dividends paid during the depression were made available through the operating process and did not come from a storehouse of reserves or liquid assets. The summary:

	<i>Reported</i>	<i>Adjusted</i>
Retained earnings, 1922-30	\$465,378,000	\$469,034,000
Dividends in excess of earn- ings, 1931-33	85,824,000	-0-
Balance retained	\$379,554,000	\$469,034,000

Nash Motor Car Company* is somewhat famous for its highly liquid asset structure. For years during the twenties the cash balance alone was greater than all plant assets and when combined with marketable securities the liquid assets were twice as great as all other assets. From 1922-29 Nash retained 44 per cent of all earnings. In 1930 about one-half the dividend requirement was earned and dividends were reduced some 20 per cent. Through the bad years of 1931-34 dividends were maintained on an average at 41 per cent of 1926-29 rates. In spite of drastic reductions the payments far exceeded reported earnings and absorbed \$14,610,000 of the \$59,000,000 of funds retained during the twenties. The summary shows no exception to the assertion that a large part of income during the twenties did not reach the stockholder during the depression years, regardless of how invested.

	<i>Reported</i>	<i>Adjusted</i>
Retained earnings, 1922-29	\$56,575,000	\$58,813,000
Dividends in excess of earnings, 1930-34	20,439,000	14,610,000
Balance retained	<hr/> \$36,136,000	<hr/> \$44,203,000

Mack Trucks, like the other automobile producers just reviewed, operated profitably through the twenties, retained a large fraction of the earnings, and continued to pay at least some dividends each year of the early thirties. Mack reported operating losses during the poorest years and undoubtedly drew upon the surplus to pay whatever dividends were distributed, but again it is obvious that the stockholder paid dearly for his small depression dividend in terms of income withheld during the twenties.

	<i>Reported</i>	<i>Adjusted</i>
Retained earnings, 1922-29	\$24,441,000	\$23,941,000
Losses, 1930-34	3,435,000	1,313,000
Balance available	<hr/> \$21,006,000	<hr/> \$22,628,000
Dividends, 1930-34	7,850,000	7,850,000
Balance retained	<hr/> \$13,156,000	<hr/> \$14,788,000

* Now Nash-Kelvinator.

In the rubber industry 1930 was a very unprofitable year and thereafter through 1933 conditions were poor. During this time, as can be seen from Table 11, Firestone reported moderate income but paid substantial dividends in excess of the earnings. The Firestone dividend record is far superior to that of other companies in the industry, but it demonstrates again that extensive dividends are not paid in excess of current income. Through four years of greatly curtailed operations Firestone disbursed to common stockholders \$7,425,000 in excess of earnings which is 20 per cent of the \$37,466,000 retained in the eight preceding years. The summary:

	<i>Reported</i>	<i>Adjusted</i>
Retained earnings, 1922-29	\$43,221,000	\$37,466,000
Common dividends in excess of earnings, 1930-33	5,418,000	7,425,000
Balance retained	<hr/> \$37,803,000	<hr/> \$30,041,000

As a final illustration of companies that paid moderate dividends through the depression let us examine the record of California Packing Company. This company retained a small fraction of the 1922-30 earnings and has a good depression record of dividends paid in spite of generous payments during the twenties. Dividends in 1931 were paid at the usual rate but in 1932 and 1933 when operations were conducted with heavy losses dividends were greatly curtailed and finally omitted in 1933. California Packing Company retained a very moderate 35 per cent of 1922-30 earnings, paid dividends far in excess of earnings through the depression but ceased payments when severe losses were incurred, financed heavily with funded debt in 1931, and resumed dividends in 1934 at the first sign of profits. The summary:

	<i>Reported</i>	<i>Adjusted</i>
Retained earnings, 1922-30	\$16,433,000	\$16,433,000
Operating losses, 1931-33*	9,870,000	7,778,000
Dividends in excess of earnings, 1931-33	4,887,000	4,887,000
Balance retained	<hr/> \$ 1,676,000	<hr/> \$ 3,768,000

* Contains \$2,500,000 bond interest.

The prosperity and depression earnings and dividends of the twenty-four companies presented in Table 11 is a remarkable display of operating results. Each of these companies paid dividends in the early thirties that resulted in surplus charges with the exception of Owens-Illinois Glass and Corn Products. The important point, however, is that only a fraction of the previously withheld earnings was used to pay dividends. During the depression stockholders received 24.5 per cent of the billion and a half dollars earned and reinvested during the twenties. In the poorest years of the most severe depression in history these companies charged \$372,825,000 of their dividend payments against surplus, and if we look no further this is a most impressive achievement. When we add the comment that these same companies paid \$610,810,000 additional dividends that they earned during the poorest years according to their reported figures and that funds received through operations were greatly in excess of the reported earnings, dividends charged to surplus do not seem so impressive, especially when we remember that dividend payments were reduced substantially and that the \$372,825,000 is less than 25 per cent of the earnings withheld during the twenties.

Of even more significance, there seems to be no relation between the ability to pay depression dividends and the amount of earnings previously retained. These companies maintained moderate dividend payments during the early thirties because in most cases they were able to operate with moderate success.

Forty Per Cent of Companies with Poorest Depression Dividend Records

Twenty-nine of the seventy-two corporations in this sample made drastic reductions in dividend payments during the early thirties and we find one important and outstanding factor which explains the inability to continue dividends. The earnings withheld and reinvested during the twenties were lost during the poor years and hence could not possibly be used for dividends. In Table 12 the companies are arranged in order of dividend maintenance and the prosperity earnings retained are related to depression dividends paid.

TABLE 12—COMPARISON OF PROSPERITY EARNINGS RETAINED WITH DEPRESSION DIVIDENDS PAID
Twenty-Nine Companies that Reduced Common Dividends More than 70 Per Cent
(Amounts in thousands of dollars)

Company	Income and Dividends in Depression Period						Depression Dividends as a Per Cent of 1930 Assets		
	Earnings Retained in Prosperity Period			Excess of Dividends over Income					
	Per Cent of Dividend Reduction	Per Cent of Total Net Income	Per Cent of Earnings Available to Common Stock	Reported Income after Interest	Adjusted Income after Common Dividends	Reported	Excess as Per Cent of Earnings Retained in Prosperity Period	Reported	Adjusted
American Car and Foundry Co.	\$ 3,504	-0-	-0-	\$ -3,381	\$ -2,450	\$ 6,750	\$ 10,131	\$ 19,200	-0-
Hudson Motor Car Co.	46,940	52	52	\$ -14,744	\$ -9,802	\$ 8,115	22,859	48,7	-38,1
Deere & Co.	28,848	53	87	\$ -8,716	\$ -4,806	\$ 4,877	13,593	56,83	47,1
Inland Steel Co.	22,918	35	40	1,840	1,840	4,200	2,360	10,6	4,2
Allis-Chalmers Manufacturing Co.	79,4	7,084	22	31	5,632	5,816	7,608	7,792	107,4
B. F. Goodrich Co.	79,7	22,775	30	74	19,546	19,928	25,231	25,613	110,0
Reo Motor Car Co.	79,8	13,901	41	41	19,791	19,908	21,372	11,13	110,8
Bethlehem Steel Co.	82,5	58,229	22	53	17,774	19,490	44,048	11,080	85,7
United States Steel Corp.	83,5	12,887	51	46	16,307	16,559	97,331	21,360	128,0
J. I. Case Co.	83,7	5,853	35	78	5,241	7,563	2,817	8,038	64,2
Motor Wheel Corp.	84.0	40,556	34	37	16,637	17,273	839	2,476	10,380
Packard Motor Car Co.	87.5	9,522	50	51	13,628	7,669	6,746	20,374	42,0
Hart, Schaffner & Marx	93.1	7,816	35	46	8,263	8,534	600	8,863	50,3
Fairbanks, Morse & Co.	93.2	3,929	53	39	5,525	5,411	726	6,251	9,34
National Acme Co.	93.7	3,951	30	39	2,161	1,545	100	2,261	79,4
New York Air Brake Co.	95.3	-15,13	-0-	-0-	-0,410	-0,474	1,69	1,221	1,645
American Locomotive Co.	96.3	6,820	24	44	2,212	857	2,461	249	15,730
Consolidated Cigar Corp.									1,604
American Cyanamid & Chemical Corp.	100.0	5,858	36	46	3,339	3,529	-0-	-0-	-0-
Baldwin Locomotive Works	100.0	7,331	33	46	12,059	9,049	-700	12,759	-0-
Chicago Pneumatic Tool Co.	100.0	3,14	6	10	-931	-141	2,188	8,098	10,349
Crucible Steel Co. of America	100.0	2,443	6	10	-5,910	-3,276	335	1,513	-0-
Gulf States Steel Corp.	100.0	2,443	29	39	-1,478	-937	430	26,56	61,4
Republic Steel Corp.	100.0	5,624	12	35	-6,026	-2,076	1,898	6,669	487,6
Wheeling Steel Corp.	100.0	10,999	22	83	-7,771	-1,367	25,972	5,563	3,265
United States Rubber Co.	100.0	3,634	32	100	-5,541	-1,012	151	3,000	70,3
Mullins Manufacturing Corp.	100.0	9,97	65	100	-2,249	-9	760	1,153	20,7
Spicer Manufacturing Corp.	100.0	9,774	88	100	-2,440	-9	3,200	1,769	60,0
Worthington Pump & Machinery Corp.	100.0	1,938	18	100	-4,590	-4,304	1,264	5,860	7,9
Totals									287.1
	\$689,487	29			\$333,118	46	\$184,620	\$175,042	\$364,089

In most cases these enterprises were highly profitable during the twenties and as a group and individually they retained a substantial portion of the 1922-30 profits. In contrast with the continuously profitable companies that maintained depression dividends, this group suffered severe losses and of course could not and should not have maintained dividend payments during the poor years. Some of the depression losers did pay substantial depression dividends, however, and we shall examine in detail the records of a number of the outstanding cases.

There are four railway equipment manufacturers listed in Table 12 and each paid at least some dividends during the early thirties, but it is disconcerting to try to establish causal relationship between these dividends and earnings withheld during the twenties. American Car & Foundry and American Locomotive operated with intermittent profits during the best years of the twenties and during that time did not earn the dividends in full. The depression dividends clearly did not come from earnings of the twenties but were in reality liquidating dividends.⁴ This evidence supports the contention made earlier to the effect that dividends can be paid from capital as well as from surplus provided the funds are available. Unlike the two companies just discussed, Baldwin Locomotive and New York Air Brake each reinvested several millions of the profits of the twenties. In 1931 when losses were first experienced, Baldwin paid one-half the preferred dividends but thereafter no dividends were paid through the period under review because there were no earnings available for dividends. The record of New York Air Brake is very similar to that of Baldwin Locomotive. With no bonds or preferred stock in the capital structure, Air Brake paid a small dividend to common stockholders in 1931, but no further disbursements were made until 1936 when operating profits were again reported.⁵ Surely there is nothing in the records of these four railway equipment manufacturers to indicate that

⁴ American Locomotive reduced the par value of common stock from \$50 to \$5 per share.

⁵ There is no intent to imply that these companies should have paid depression dividends at the 1927-30 rates. The purpose of common stock financing is to provide flexibility in paying for capital invested and it is therefore illogical and inconsistent to reason that income withheld in the good years will be used to pay dividends during the poor years.

retention of prosperity profits is essential to depression dividends or that such retention assures depression dividends.

Steel manufacturers operated profitably through the twenties and generally retained a large fraction of the earnings, but we find these enterprises prominently represented in the group of corporations that reduced dividends most during the poor years. Inland Steel is the only one of the smaller producers that paid any common dividends during the early thirties. Unlike the other companies, Inland reported a profit for the 1931-34 period which made the payments possible. Inland retained 35 per cent of net income for nine profitable years retaining in total \$22,198,000. Dividends to common stock were reduced 79 per cent through 1931-34 and in aggregate required \$2,360,000 of the funds formerly withheld or little more than 10 per cent.

Bethlehem, Crucible, and Republic are representative of the larger and more profitable steel corporations, but Bethlehem is the only one which paid substantial depression dividends. Bethlehem retained 53 per cent of good year earnings available to common and paid dividends for only one year when operating losses appeared. Of the \$53,525,000 in funds retained, common stockholders eventually received \$6,400,000 or 12 per cent. Through the twenties senior securities absorbed some 60 per cent of net income and the corporation reinvested only 22 per cent of the total income. With heavy bonded debt and severe operating loss in 1932 it is not surprising to find both preferred and common dividends omitted. The summary demonstrates that a limited amount of income retained in the profitable period reached stockholders during the early thirties.

	<i>Reported</i>	<i>Adjusted</i>
Retained earnings, 1922-30	\$58,289,000	\$53,525,000
Income reported, 1931-34	354,000	-0-
Interest charges, 1931-34	27,829,000	21,214,000
Balance available	\$30,814,000	\$32,311,000
Preferred dividends, 1931-34	10,174,000	8,450,000
Common dividends, 1931-34	6,400,000	6,400,000
Balance retained	\$14,241,000	\$17,461,000

Bethlehem paid less in common and preferred dividends combined when the poor years came than was retained in 1929 alone, and it will be noticed that dividend payments were suspended during the first year of poor business. This does not prove that more dividends should have been paid during the twenties, but it does support the contention that surplus from the good years is not used extensively to pay dividends during poor years.⁶

United States Steel retained 46 per cent of 1922-30 earnings available to common stockholders (31 per cent of total income), yet common dividends were omitted during the first year of poor operations and preferred dividends reduced to about 28 per cent of the agreed rate. In 1931 common stockholders received 11 per cent of the \$332,577,000 reported income withheld or 16 per cent of the 1922-30 adjusted retained earnings, and none thereafter. On the other hand, \$95,308,000 of the reinvested profits were lost. The summary:

	<i>Reported</i>	<i>Adjusted</i>
Retained earnings, 1922-30 ...	\$332,577,000	\$312,574,000
Losses, 1931-34	95,308,000	10,460,000
Bond interest, 1931-34	20,998,000	20,998,000
Balance available	\$216,271,000	\$281,116,000
Preferred dividends, 1931-34	60,348,000	60,348,000
Common dividends, 1931-34 ..	36,984,000	36,984,000
Balance retained	\$118,939,000	\$183,784,000

Although depression dividend payments were drastically reduced on the preferred stock and omitted entirely on the common, United States Steel paid nearly \$100,000,000 in cash

⁶ The proposition can be made that common stockholders are in a better position since it is possible to pay bond interest and thereby keep control in the common. This procedure keeps control in the hands of corporate directors and officers, but the many small investors who own much of the common stock would have perhaps equally as much control if a trustee in bankruptcy were operating the enterprise. Furthermore, if the retained earnings are invested largely in inventories and plant facilities thereby setting the stage for a slump, it might be healthy to drain the profits off in the form of cash dividends and avoid or mitigate a period of forced liquidation. In any case, bond interest could still be met through asset liquidation regardless of the surplus situation.

dividends that were charged to surplus. Without the surplus, could these dividends have been paid? From a standpoint of financial ability the surplus has little bearing upon the matter but legally the dividends could not have been paid without the surplus except as liquidating dividends. In reality, these were liquidating dividends, as will be demonstrated in Chapter 5. These two large steel companies paid 65 per cent of all the depression dividends tabulated in Table 12. In each case payments to common were reduced more than 80 per cent and payments to preferred were reduced equally as much. The amounts paid are substantial and impressive but the amounts omitted are even more impressive.

It will be observed from Table 12 that a number of automobile producers and machinery manufacturers paid depression dividends of several million dollars each. Without extended discussion the tabulation in Table 13 demonstrates that in most cases the dividends paid were a small fraction of the earnings reinvested during the twenties, that generally a much greater amount of the profits were lost than materialized as cash dividends, and that these companies retained a generous portion of the profits of the twenties.

TABLE 13—RETAINED EARNINGS AND DEPRESSION DIVIDENDS OF SELECTED AUTOMOBILE AND MACHINERY MANUFACTURERS
(Amounts in thousands of dollars)

Company	Retained Earnings Reported Prosperity Period		Reported Depression Losses	Preferred and Common Dividends Depression Years
	Amount	Per Cent of Total Earnings		
Hudson Motor Car Co.	\$46,970	52	\$14,640	\$8,115
Reo Motor Car Co.	13,001	41	9,791	2,372
Packard Motor Car Co.	40,536	34	13,628	6,746
Deere & Co.	28,848	53	8,716	4,877
Allis-Chalmers Manufacturing Co.	7,084	22	2,390	1,976
J. I. Case Co.	12,487	52	5,163	2,817
Motor Wheel Corp.	5,893	35	1,637	839
Fairbanks, Morse & Co.	7,876	35	4,537	726

Prosperity Retained Earnings and Depression Dividends

The data presented in Tables 10, 11, 12, and 13 provide convincing proof that: (1) the corporations which paid most of the depression dividends operated profitably even during the poorest years and therefore did not draw upon accumulated surplus extensively in order to make the payments; (2) the corporations that found it necessary to charge dividends to surplus made drastic reductions in the dividend rates. Although the aggregate amount of dividends paid from surplus charges is large in many cases, when compared with earnings withheld during the twenties these payments seem quite inadequate to recompense the stockholder for his forbearance during the best years; (3) there is no apparent relation between earnings reinvested during the twenties and dividends paid during the early thirties; (4) in almost one-half the enterprises a much greater portion of the 1922-30 reinvested profits was lost during depression years than was paid to stockholders.

CHAPTER 4

INVESTMENT OF RETAINED EARNINGS

Thus far the observations relating to corporate income administration have been based upon analysis of the income accounts.

Although the conclusions drawn therefrom are of vital significance, it is necessary to examine the balance sheets in order to discover the real effect and nature of reinvested earnings. Sound financial policy may dictate the retention of a portion of the income in order to provide for future losses and unforeseen contingencies. In essence, this statement means that net income cannot be measured in short time segments and it is therefore necessary to assume that short period reports are overoptimistic and do not recognize or cannot measure certain long term influences which inevitably reduce reported profits. Plowed back earnings measured in short time intervals represent a semisuspense account pending further developments.

It must be clear that reported short period income is supported and measured by valid assets, and retained income is represented by asset increases or liability decreases. The productive process culminates in revenue supported by eventual cash collections and corporate management formulates the expansion, investment, and dividend policies designed to make effective use of the funds produced. An examination of balance sheets reveals the manner in which retained earnings and new capital are invested and provides further convincing evidence that reinvested earnings do not create a *fund* or *reserve* from which dividends can be paid during bad years.

Nineteen companies in this sample increased the rate of common dividend payments during the depression, while twenty-nine of the enterprises reduced depression dividends more than 70 per cent. Did these two groups of corporations invest prosperity earnings in a distinctly different way which influenced or led to the different depression records?

*Nineteen Companies that Increased
Dividends in Depression Years*

The companies which continued profitable operations after 1930 and increased dividend disbursements were producers of necessary consumption goods with the exception of four industrial chemical manufacturers. The composition of this continuously profitable group, classified by industry, shows:

- 5 food processors
- 5 tobacco and beverage companies
- 3 retail merchandisers
- 2 can companies
- 4 industrial chemical companies

In theory, these companies are expected to feel cyclical influences to only a moderate degree and as a consequence are expected to distribute generous dividends compared to current income. The periodic revenue and net income for these companies show remarkable stability, but they retained more of the 1922-30 income than any other group.

Table 14 assembles the fifteen year financial history of the nineteen companies and shows how funds were invested during the best years and extent of the liquidation during depression years. During the prosperity decade these corporations retained \$779,224,000 which is 42 per cent of their reported operating income.

New stock and bond capital in excess of retirements totals \$115,655,000 and added to reported retained income provides \$894,879,000 for corporate expansion. Cash and liquid securities absorbed 35.5 per cent of these funds, while 22 per cent was invested in inventories and receivables. Working capital thus represents 56.5 per cent of the expansion during the twenties, while investment in plant assets absorbed 40 per cent of the combined reinvested income and net new capital.¹ Details

¹ One might say the \$505,980,000 working capital increase came entirely from the \$779,224,000 reported retained earnings, and on that assumption 65 per cent of the earned surplus was thus invested in working capital and perhaps 35 per cent in plant assets. There is little merit to the ranking of sources, however, and the writer prefers to regard new capital funds and retained income as a homogeneous supply of capital for corporate expansion.

Note that these percentage figures are based upon reported retained earnings plus *net* new capital issues, whereas Table 14 is based upon retained earnings plus all new capital.

TABLE 14—SOURCES AND APPLICATION OF FUNDS
 Nineteen Companies Paying Larger Dividends during the Depression than during Prosperity
 (Amounts in thousands of dollars)

Source or Application	Prosperity Period		Depression Period	Recovery Period	
	Amounts	Per Cent of Total Funds		Amounts	Per Cent of Total Funds
Available to common	\$ 1,699,657		\$ 483,658	\$ 483,628	
Common dividends	920,433	*	510,919	364,131	
Retained earnings reported	\$ 779,224	72.8	\$ 27,261	\$ 119,497	77.9
Surplus adjustments	7,402	0.7	-42,713	-22,215	-14.6
Retained earnings adjusted	\$ 786,626	73.5	\$ 69,974	\$ 97,222	63.3
Plant asset liquidation (unexpended depreciation)	359	0.1	45,726	19,028	12.4
Available from operations	\$ 786,985	73.6	\$ -24,248	\$ 116,250	75.7
Stock issued	216,184	20.2	16,167	34,990	22.8
Long term debt issued	66,840	6.2	1,099	2,237	1.5
Total available for investment	\$ 1,070,009	100.0	\$ -6,982	\$ 153,477	100.0
Invested In					
Working capital					
Cash	\$ 121,720	11.4	\$ -38,209	\$ 9,100	5.9
Liquid securities	196,167	18.3	-135,862	19,669	13.0
Receivables	42,311	4.0	-19,770	6,169	4.0
Inventories	155,831	14.6	54,580	66,815	43.5
Current liabilities	-10,052	-0.9	23,327	-45,610	-29.7
Working capital change	\$ 505,980	47.3	\$ -115,934	\$ 56,143	36.6
Investment, related companies					
Sundry assets	12,806	1.2	58,308	-6,459	-4.2
Intangible assets	21,288	2.0	-29,460	-1,531	-1.0
Plant assets	3,803	0.4	4,921	2,334	1.5
Stock retired	358,776	33.5	12,077	9,352	6.1
Long term debt retired	103,136	9.6	49,900	65,518	42.7
Total invested	64,213	6.0	13,207	28,128	18.3
		100.0	\$ -6,981	\$ 153,485	100.0

* Represents 54 per cent of earnings available to common stock. † Represents 75 per cent of earnings available to common stock.

of the utilization of funds, including both retained earnings and new capital, are presented in Table 15 for these nineteen companies.

TABLE 15—UTILIZATION OF EARNINGS AND NEW CAPITAL
DURING PROSPERITY PERIOD
Nineteen Companies that Increased Dividend Payments
during Depression Years

Company	Percentage Application of Funds					
	Total	Working Capital	Securities Investments	Plant Assets	Retirement of Senior Securities	Sundry
Hershey Chocolate Corp.	100	14	-0-	-4	90	-0-
General Cigar Company, Inc.	100	48	-4	19	37	-0-
F. W. Woolworth Co.	100	21	23	30	7	19
Loose-Wiles Biscuit Co.	100	23	-0-	54	11	12
Coca-Cola Co.	100	32	3	3	62	-0-
Borden Co.	100	27	-5	73	5	-0-
Air Reduction Company, Inc.	100	53	14	33	-0-	-0-
J. C. Penney Co.	100	72	2	25	1	-0-
Pillsbury Flour Mills Co.	100	16	5	62	15	2
Ligget & Myers Tobacco Co.	100	100	-0-	-0-	-0-	-0-
Continental Can Company, Inc.	100	50	5	53	-0-	-8
American Can Co.	100	19	3	64	12	2
Mathieson Alkali Works, Inc.	100	12	10	92	-0-	-14
S. S. Kresge Co.	100	19	-0-	84	4	-7
Allied Chemical & Dye Corp.	100	91	-17	16	10	-0-
R. J. Reynolds Tobacco Co.	100	59	-4	8	37	-0-
Quaker Oats Co.	100	62	-2	40	-0-	-0-
Wm. Wrigley, Jr. Co.	100	88	-9	13	8	-0-
Commercial Solvents Corp.	100	95	-0-	-0-	10	-5

There is no predominant characteristic of investing income among these companies. Ten concerns invested more than 50 per cent of new funds in working capital, seven companies invested more than 50 per cent in plant facilities, and the other two companies retired senior securities.

In the poorest years of the early thirties according to reported figures, these nineteen companies paid \$27,261,000 of dividends in excess of earnings and when adjusted for direct surplus charges the earning deficiency is nearly \$70,000,000. Plant assets were liquidated for 65 per cent of this deficiency through the process of "unexpended depreciation." Working capital, especially liquid assets, decreased substantially although inventories increased. It is interesting to note that the working

capital decrease is almost equal to retirement of outstanding stocks and bonds plus investments in nonliquid securities of other companies.²

Twenty-Nine Companies that Reduced Common Dividends More than 70 Per Cent

The twenty-nine companies that reduced common dividend payments by more than 70 per cent during the poorest years operate in the following industries:

- 3 automobile manufacturers (smaller companies)
- 3 automobile equipment manufacturers
- 4 railway equipment manufacturers
- 7 machinery manufacturers
- 7 steel manufacturers
- 1 merchandiser
- 1 tobacco company
- 2 rubber companies
- 1 chemical producer

For the most part, companies in this category produce capital equipment or durable consumer goods. All except three of the companies reported substantial operating losses during the poorest years, but eighteen of these corporations retained more than 30 per cent of total net income reported during the decade of the twenties. As a group they retained 29 per cent of total income reported during the best years which should be ample to smooth the dividend distribution if that accomplishment is possible from surplus reserves created by retaining earnings. It is interesting to note that only two of these companies paid dividends through the poorest years in excess of 10 per cent of 1930 assets.

Table 16 assembles in gross aggregates the fifteen year financial history of twenty-five companies with poorest depression common dividend records compared to the late twenties

² Figures published by the New York Stock Exchange in February, 1934, reveal that 259 corporations with shares listed on the New York Stock Exchange had reacquired portions of their own stock during the 1931-33 period.

CORPORATE PROFITS

71

TABLE 16—SOURCES AND APPLICATION OF FUNDS
Twenty-Five Companies that Reduced Common Dividends More than 70 Per Cent
(Amounts in thousands of dollars)

Source or Application	Prosperity Period		Depression Period	Recovery Period	
	Amounts	Per Cent of Total Funds		Amounts	Per Cent of Total Funds
Available to common					
Common dividends	\$ 1,451,575	*	\$ 400,490	\$ 123,969	†
Retained earnings reported	747,018		72,732	34,277	
Surplus adjustments	\$ 704,557	37.8	\$ 473,222	\$ 89,692	33.3
Retained earnings adjusted	-84,911	-4.6	-135,032	-11,598	-4.3
Plant asset liquidation (unexpended depreciation)	\$ 619,646	33.2	\$ 608,254	\$ 78,094	29.0
4,723	0.3		142,844	23,169	8.6
Available from operations	\$ 624,369	33.5	\$ 465,410	\$ 101,263	37.6
Stock issued	892,851	47.9	14,389	37,121	13.8
Long term debt issued	346,454	18.6	85,515	131,009	48.6
Total available for investment	<u>\$1,863,674</u>	<u>100.0</u>	<u>\$365,506</u>	<u>\$269,503</u>	<u>100.0</u>
<u>INVESTED IN</u>					
Working capital					
Cash	\$ 66,096	3.5	\$ -83,058	\$ 71,633	26.6
Liquid securities	-59,973	-3.2	-57,335	-44,495	-16.5
Receivables	77,851	4.2	-141,886	134,351	49.9
Inventories	165,455	8.9	-216,636	170,796	63.5
Current liabilities	-67,632	-3.6	-159,517	-145,441	-54.0
Working capital change	\$ 181,813	9.8	\$ -339,398	\$ 186,844	69.4
Investment, related companies					
Working capital	62,496	3.4	10,827	-3,011	-1.1
Cash	15,329	0.8	-42,286	-9,441	-3.5
Liquid securities	87,556	4.7	-79,371	20,334	7.5
Receivables	725,935	39.0	-48,033	3,763	1.4
Inventories	116,649	6.3	17,770	12,527	4.6
Current liabilities	673,898	36.0	114,986	58,486	21.7
Long term debt retired					
Totals	<u>\$1,863,674</u>	<u>100.0</u>	<u>\$365,505</u>	<u>\$269,502</u>	<u>100.0</u>

* Represents 51 per cent of earnings available to common stock. † Represents 28 per cent of earnings available to common stock.

and shows how the funds accumulated during the good years were invested and calls attention to the sources that enabled them to meet earning deficiencies of the early thirties.⁸

During the prosperity decade these twenty-five corporations retained \$704,557,000 which is 49 per cent of the income reported available to common stockholders and 30 per cent of the \$2,374,264,000 net income of the period. New stocks and bonds were issued in total amount of \$1,239,305,000 but \$790,547,000 were retired during the decade leaving \$448,758,000 of new capital in addition to retained earnings. If one regards net new capital and retained earnings as homogeneous funds available for investment, they were invested 16 per cent in working capital, 63 per cent in plant assets, 5 per cent in securities of related companies, and 16 per cent in other assets.⁴ If we exclude United States Steel, these poor depression payers invested their available funds of the best years, 21 per cent in working capital, 63 per cent in plant facilities, 6 per cent in securities of related companies, and 10 per cent in other assets.

Table 17 assembles the twenty-five companies by name and shows, by chief asset categories, how the earnings and new capital contributions of the profitable period were invested. It is difficult to discern any uniformity in investment policies. Ten of the companies invested the funds 25 per cent or more in working capital, seventeen of the enterprises invested more than 25 per cent of their funds in plant assets, and fourteen of the companies utilized more than 25 per cent in retirement of stocks and bonds.

Comparative Analysis

Table 18 is designed to display the manner in which nineteen continuously profitable generous depression dividend paying companies invested prosperity accumulations compared to twenty-five companies that reduced depression common dividends

⁸ American Car and Foundry, American Locomotive, National Acme, and Worthington Pump reduced depression dividends more than 70 per cent but are excluded because of 1922-30 operating losses.

United States Steel is included in this group and represents approximately one-half the total figure.

⁴ These figures do not appear in Table 16 because gross new capital is there considered as available for investment.

TABLE 17—UTILIZATION OF EARNINGS AND NEW CAPITAL
DURING PROSPERITY PERIOD
Twenty-Five Companies that Reduced Dividends More than 70 Per Cent

Company	Percentage Application of Funds					
	Total	Working Capital	Securities Investments	Plant Assets	Retirement of Senior Securities	Sundry
Hudson Motor Car Co.	100	48	-0-	51	-0-	1
Deere & Co.	100	67	-0-	8	28	-3
Inland Steel Co.	100	19	12	42	24	3
Allis-Chalmers Manufacturing Co.	100	24	-0-	34	34	8
B. F. Goodrich Co.	100	14	-3	48	39	2
Reo Motor Car Co.	100	65	1	32	2	
Bethlehem Steel Co.	100	7	1	55	35	2
United States Steel Corp.	100	-3	1	24	76	2
J. I. Case Co.	100	102	-3	3	-0-	-2
Motor Wheel Corp.	100	13	14	25	47	1
Packard Motor Car Co.	100	-11	3	41	70	-3
Hart, Schaffner & Marx	100	28	35	-0-	33	4
Fairbanks, Morse & Co.	100	58	-4	24	10	12
New York Air Brake Co.	100	27	-0-	-0-	60	13
Consolidated Cigar Corp.	100	42	-0-	22	36	-0-
American Cyanamid & Chemical Corp.	100	23	-5	53	9	20
Baldwin Locomotive Works	100	-47	32	99	-0-	16
Chicago Pneumatic Tool Co.	100	-26	10	80	36	-0-
Crucible Steel Co. of America	100	-17	-1	60	54	4
Gulf States Steel Corp.	100	5	1	88	3	3
Republic Steel Corp.	100	13	9	75	3	-0-
Wheeling Steel Corp.	100	26	-1	55	13	7
United States Rubber Co.	100	-14	59	-223	110	168
Mullins Manufacturing Corp.	100	36	-8	68	4	-0-
Spicer Manufacturing Corp.	100	-1	-6	116	125	-134

more than 70 per cent. There is considerable similarity of policy among these companies which had such divergent depression experiences. Forty-seven per cent of the depression payers invested more than one-half their retained earnings and new capital in working capital and likewise 16 per cent of the companies which made drastic reductions in depression dividends invested more than one-half their retained income in the same manner. Fifty-eight per cent of the generous dividend companies invested less than one-half the prosperity funds in plant assets, and 52 per cent of the concerns that reduced dividends invested less than one-half in plant facilities.

TABLE 18—COMPARISON OF FUNDAMENTAL UTILIZATION POLICIES

Per Cent of Retained Earnings Invested	Application of Funds				
	Working Capital	Security Investment	Plant Assets	Retirement of Securities	Sundry
Companies Increasing Dividends					
Less than 25	7	13	7	15	14
25-50	3	-0-	4	2	-0-
50-75	5	-0-	5	1	-0-
More than 75	4	-0-	2	1	-0-
Liquidated	-0-	6	1	-0-	5
Total companies	19	19	19	19	19
Companies Reducing Dividends More than 70 Per Cent					
Less than 25	8	14	7	11	20
25-50	6	2	6	8	-0-
50-75	3	1	6	4	-0-
More than 75	1	-0-	5	2	1
Liquidated	7	8	1	-0-	4
Total companies	25	25	25	25	25

It is recognized that income and new capital invested in various assets may not be the most significant factor. A profitable company might invest equal portions of the net income in a variety of assets while a much less profitable company might utilize all of its earnings to strengthen working capital and still be in unhealthy condition due to inadequate earnings in the first place.

If we compare 1921 working capital and plant assets with working capital and plant assets at the peak of the best years, the statistical fault just referred to is eliminated and the net percentage increase or decrease in these two main asset categories is measured.⁵ Tables 19 and 20 show investments in working capital and fixed assets made by the continuously generous dividend payers compared to the companies which greatly reduced depression dividends.

⁵ Write-ups, write-downs, and other inconsistencies in valuing various assets, especially in the plant accounting, render these figures unreliable to an undetermined but small extent in most cases. Likewise, transfers of securities from a marketable classification to investment accounts may have some influence on the net changes.

CORPORATE PROFITS

75

TABLE 19—CHANGES IN WORKING CAPITAL AND PLANT ASSETS, PROSPERITY PERIOD
 Nineteen Companies that Increased Dividend Payments during Depression Years
 (Amounts in thousands of dollars)

Company	Working Capital				Plant Assets		
	1921	1930*	Amount	Increase Per Cent	1921	1930*	Amount
Hershey Chocolate Corp.	\$-2,544	\$ 4,619	\$ 7,613	-0- 82	\$27,478	\$ 8,977	\$-18,501
General Cigar Company, Inc.	14,224	25,900	11,676	82	1,937	6,510	4,573
F. W. Woolworth Co.	24,708	52,781	28,013	114	16,953	57,251	40,298
Loose-Wiles Biscuit Co.	5,754	7,966	2,212	38	12,989	18,287	5,298
Coca-Cola Co.	874	13,957	13,083	1,497	5,167	6,873	1,106
Borden Co.	8,562	42,968	34,406	402	22,152	114,355	92,203
Air Reduction Company, Inc.	3,307	16,659	13,352	404	4,956	13,304	8,348
J. C. Penney Co.	8,422	50,516	42,094	500	971	15,638	14,667
Pillsbury Flour Mills Co.	2,757	6,921	4,164	151	2,216	18,146	15,930
Liggett & Myers Tobacco Co.	56,683	158,390	101,707	179	12,021	11,662	-359
Continental Can Company, Inc.	2,958	31,075	28,117	951	11,713	45,853	34,140
American Can Co.	29,736	41,699	11,963	40	95,873	136,844	40,971
Mathieson Alkali Works, Inc.	1,201	2,404	1,203	100	6,979	16,477	9,498
S. S. Kresge Co.	9,953	25,930	15,977	161	11,973	83,907	71,934
Allied Chemical & Dye Corp.	66,150	144,470	78,320	118	88,323	101,978	13,655
R. J. Reynolds Tobacco Co.	78,775	139,184	60,409	77	8,369	16,544	8,175
Quaker Oats Co.	12,708	28,006	15,298	120	19,695	19,255	-440
Wm. Wrigley, Jr. Co.	9,591	38,550	28,959	302	7,415	11,804	4,389
Commercial Solvents Corp.	253	8,053	7,800	3,083	1,237	1,237	-0-

* Wm. Wrigley, Coca-Cola, and General Cigar, period closes 1931. Liggett & Myers and R. J. Reynolds, period closes 1932. J. C. Penney, period closes 1929.

TABLE 20—CHANGES IN WORKING CAPITAL AND PLANT ASSETS, PROSPERITY PERIOD
Twenty-Five Companies that Reduced Dividends More than 70 Per Cent
(Amounts in thousands of dollars)

Company	Working Capital				Plant Assets			
	1921	1930*	Increase or Decrease		1921	1930*	Increase or Decrease	
			Amount	Per Cent			Amount	Per Cent
Hudson Motor Car Co.	\$ 2,962	\$ 25,608	\$ 22,646	765	\$ 9,059	\$ 33,276	\$ 4,217	267
Deere & Co.	\$ 58,803	\$ 63,045	\$ 4,242	7	19,298	22,143	2,845	15
Inland Steel Co.	13,652	26,104	12,452	91	34,527	62,670	28,143	82
Allis-Chalmers Manufacturing Co.	11,830	19,761	7,931	67	9,951	13,193	3,242	33
B. F. Goodrich Co.	48,618	58,920	10,302	21	32,116	67,600	35,484	110
Reo Motor Car Co.	10,552	20,198	9,646	91	5,922	10,689	4,767	80
Bethlehem Steel Co.	87,748	119,421	31,673	36	238,286	502,154	263,868	111
United States Steel Corp.	48,183	469,500	-15,693	-3	1,644,795	1,677,327	32,532	2
J. I. Case Co.	14,197	36,526	22,329	157	12,339	12,966	567	5
Motor Wheel Corp.	3,530	4,604	1,074	30	4,918	7,052	2,134	43
Packard Motor Car Co.	32,360	28,637	-3,723	-12	21,597	35,911	14,314	66
Hart, Schaffner & Marx	10,410	14,011	3,601	35	576	388	-238	-41
Fairbanks, Morse & Co.	15,830	19,761	7,931	67	9,951	13,193	3,242	33
New York Air Brake Co.	5,699	1,922	-3,777	-66	13,946	9,462	-4,484	-32
Consolidated Cigar Corp.	3,608	17,326	13,718	380	810	3,151	2,341	289
American Cyanamid & Chemical Corp.	1,969	18,614	16,645	845	4,242	42,535	38,293	903
Baldwin Locomotive Works	30,630	22,091	-8,539	-28	27,080	52,880	25,800	95
Chicago Pneumatic Tool Co.	8,335	7,665	-670	-8	8,922	10,967	2,045	23
Crucible Steel Co. of America	26,121	23,194	-2,927	-11	81,815	92,273	10,458	13
Gulf States Steel Corp.	2,225	2,964	739	33	13,441	25,979	12,538	93
Republic Steel Corp.	15,180	41,381	26,201	173	81,754	230,020	148,266	181
Wheeling Steel Corp.	22,743	33,052	10,309	45	54,478	76,584	22,106	41
United States Rubber Co.	83,724	79,448	-4,276	-5	165,657	101,384	-68,273	-40
Mullins Manufacturing Corp.	648	1,799	1,151	178	2,380	4,578	2,198	92
Spicer Manufacturing Corp.	3,596	3,880	284	8	3,807	7,885	4,078	107

* Hudson Motor Car, B. F. Goodrich, Reo Motor Car, and United States Rubber, period ends 1929. Consolidated Cigar, period ends 1931.

There is considerable evidence that the continuously profitable companies tended to increase working capital more and plant assets relatively less than companies that reduced dividends and generally reported depression losses. Whether this procedure caused the depression records or influenced their respective experiences is an entirely different matter. The first named group undoubtedly requires much less investment in plant facilities and probably requires considerably more investment in inventories. A condensed summary of the record appears in Table 21.

All of the continuously profitable companies increased working capital by large amounts. While many companies that reduced dividends drastically show large increases in working capital during the best years, many of them added little to the working capital and in 24 per cent of the cases it was reduced during the best years. Many of these concerns actually had no good years and therefore could not exercise much choice in the selection of investment media. The investment in plant assets is very similar between the two groups. Most of the companies made tremendously large investments in the plants, while several in each group reduced the book value of plant properties.

TABLE 21—DISTRIBUTION OF COMPANIES BY PERCENTAGE INCREASE IN WORKING CAPITAL AND PLANT ASSETS, PROSPERITY PERIOD

Per Cent Increase	Working Capital		Plant Assets	
	Number of Companies		Number of Companies	
Companies Increasing Dividends				
More than 100	15		9	
50-100	2		2	
Less than 50	2		5	
Liquidated	0		3	
Total Companies	19		19	
Companies Reducing Dividends More than 70 Per Cent				
More than 100	6		7	
50-100	4		6	
Less than 50	8		9	
Liquidated	7		3	
Total Companies	25		25	

Twenty-Four Companies that Paid Substantial Depression Dividends in Excess of Earnings

Attention is now directed to the remarkable record of twenty-four outstanding corporations (33 per cent of the sample) that paid cash dividends during the depression in spite of inadequate earnings or actual operating losses. How was the income of the best years invested in such a manner as to provide a "fund" or "reserve" from which depression dividends were paid? In Table 22 the companies that paid dividends requiring substantial charges to surplus are arranged by industry groups and within the groups in order of dividend maintenance.

During the decade of the twenties the twenty-four companies under observation had varying degrees of successful operation and some retained much and others retained little of the net income. In most cases the earnings were reinvested in all the asset categories or were used to retire outstanding debt and stock issues. In a few instances certain assets were selected as an investment reservoir, especially in the inventories. Plant equipment absorbed more of the retained income than any other asset, 75 per cent of the companies investing from 20 per cent to 55 per cent of the 1922-30 retained income in plant facilities.

There is little indication that the manner of investing earnings in the prosperous decade accounts for the depression records. Ability to pay dividends is dependent upon continued earnings and a company could reinvest all of the income made during a cyclical upswing in either working capital or plant facilities and still pay little if any dividends during a depression if there is inadequate revenue. If expanded plant facilities prove to be needed and can be operated profitably during recessions, a surplus reserve represented by such investment is a source of financial strength. On the contrary, if plants are idle during periods of slack business, the surplus reserve thus invested is a millstone. As long as a concern can produce revenue which recovers something more than out-of-pocket costs it can continue dividends and at the same time keep the working capital position healthy. If revenue is inadequate to meet the operating expenditures, it is almost a foregone conclusion that cash and marketable securities will prove inadequate to meet the occasion.

CORPORATE PROFITS

79

TABLE 22—PERCENTAGE INVESTMENT OF RETAINED EARNINGS AND NEW CAPITAL ISSUES, PROSPERITY PERIOD
Twenty-Four Companies Paying Depression Dividends Substantially in Excess of
Current Earnings, Classified by Industry

Industry	Application of Funds						Capital Issues	Sundry
	Cash	Liquid Securities	Receivables	Inventories	Current Liabilities	Security Investments		
Machinery manufacturing								
Otis Elevator Co.	16	1	18	-7	20	32	-0-	-0-
International Harvester Co.	17	2	69	-4	30	-0-	-1	-0-
Deere & Company	5	-0-	-25	-3	8	-28	-0-	-0-
Tire and rubber								
Goodyear Tire & Rubber Co.	20	-5	11	-8	-21	44	-12	
Firestone Tire & Rubber Co.	21	-0-	4	14	5	3	2	
B. F. Goodrich Co.	11	-0-	19	-38	-3	48	38	3
Electrical equipment								
Westinghouse Electric & Manufacturing Co.	13	1	12	-9	-3	22	33	-5
General Electric Co.	47	-11	-6	1	-7	60	-10	17
Automobile								
Chrysler Corp.	21	-1	7	18	-8	5	42	16
General Motors Corp.	13	5	1	4	-0-	24	23	5
Nash-Kelvinator Corp.	1	48	1	2	-1	-0-	7	-0-
Packard Motor Car Co.	-1	24	-0-	-27	-6	3	41	-4
Mack Trucks, Inc.	-0-	-0-	24	-13	-2	1	22	40
Hudson Motor Car Co.	7	26	6	21	-13	-0-	51	2
Timken Roller Bearing Co.	1	39	4	4	-0-	6	37	3
Iron and steel								
Bethlehem Steel Corp.	2	-2	2	7	-3	1	55	36
United States Steel Corp.	1	-10	-3	14	-4	1	24	76
American Car and Foundry Co.*	-41	-11	-32	-33	-0-	-0-	-1	-0-
Merchandising								
J. C. Penney Co.	11	-4	5	74	-13	3	25	1
Sears, Roebuck & Co.	-1	6	-13	9	-3	1	54	-2
California Packing Corp.	1	-0-	16	28	-28	35	38	5
Tobacco								
General Cigar Company, Inc.	4	8	-0-	31	4	-4	19	37
R. J. Reynolds Tobacco Co.	32	14	-0-	13	-0-	-3	9	1
American Tobacco Co.	29	-0-	3	29	-3	21	9	11

* Net liquidation during the period.

CHAPTER 5

ASSET LIQUIDATION AND EARNING DEFICIENCIES

How did specific corporations meet their depression losses? It is in large measure nonsensical to say that surplus was drawn upon because surplus is a balancing figure on the equity side of the balance sheet even though it may represent earnings reinvested in some form. In this chapter the sampled corporations are divided into three groups in order to observe the process of asset liquidation during the depression years.

Seventeen companies (approximately 25 per cent of sample) paid dividends materially in excess of depression earnings.¹ Eighteen companies (25 per cent of the sample) paid dividends material in amount, after reporting operating losses. Ten concerns in this sample earned very little even during the best years and dividend payments were negligible, but how were the operating losses financed? Of the remaining twenty-seven companies in the sample, fifteen increased dividend payments during the poorest years but earned the requirements in full; ten reported net income during the depression but dividends were reduced sufficiently to stay within the income; and two companies had nominal losses and paid nominal dividends.

Seventeen Companies Paying Depression Dividends Substantially in Excess of Earnings

During the poorest years a number of outstanding companies paid dividends considerably in excess of the reported income. Compared to total income retained during the decade of the twenties the disbursements were relatively small in most cases, but in immediate dollars the amounts appear impressive. How were surplus reserves invested and what assets were liqui-

¹ Companies are deemed to have paid a significant amount of dividends in excess of net income when common and preferred payments amount to \$1,000,000, and if the disbursements exceed reported income available by more than 10 per cent. Companies in Table 22 paid dividends of more than \$4,500,000, hence the difference in number of companies.

dated in order to meet the deficiencies? In condensed form the answers are presented in Tables 23, 24, and 25. For those interested in details of representative company performances, attention is directed to Appendix III A.

Table 23 shows in aggregates the asset expansion and liquidation through the 1922-33 cycle. Observe that percentagewise the asset structure does not differ greatly at any point

TABLE 23—ASSET EXPANSION AND LIQUIDATION, 1921-33
Seventeen Companies Paying Depression Dividends
Substantially in Excess of Earnings
(Amounts in thousands of dollars)

Source or Application of Funds	1921		1930		1933		1931-33 Increase or Decrease
	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent	
Cash	\$ 117,960	19	\$ 381,275	34	\$ 205,123	24	\$-176,152
Marketable securities	71,460	12	145,898	13	151,295	18	5,397
Receivables	195,309	32	207,730	18	120,276	14	-87,454
Inventories	396,452	65	598,098	53	517,857	60	-80,241
Total current assets	\$ 781,184	128	\$1,332,998	118	\$ 994,553	115	\$-338,445
Current liabilities	170,332	28	199,934	18	131,244	15	\$-68,690
Net working capital	\$ 610,850	46	\$1,133,062	49	\$ 863,310	45	\$-269,752
Investments	134,348	10	327,352	13	275,705	15	-51,647
Sundry assets	11,264	1	21,781	1	16,180	1	-5,601
Intangible assets	197,722	15	105,788	7	117,578	6	11,790
Plant assets	362,514	28	701,095	30	616,120	33	-23,817
Total	\$1,316,695	100	\$2,289,079	100	\$1,888,893	100	\$-339,027
Unexpended depreciation							61,158
Total liquidation							\$ 400,185
New security issues							774
Total deficiency							\$ 400,959
Intangible assets written off							26,574
Adjusted earning deficiency							\$ 374,385*
Surplus reserves	\$ 316,737		\$ 978,912		\$ 574,195		\$-404,717
Add: American Tobacco Company payment for brand names charged to surplus					36,749		
Losses reported					\$ 610,944		\$-367,968
Dividends and interest					23,180		
Write-downs and adjustments					155,402		-367,968
Capital stock revaluations and stock dividends, net					189,386		
					\$ 978,912		
							6,417
							\$ 374,385

* Earning deficiency adjusted, depression period, \$374,385,000.
Earning deficiency reported, depression period, 205,799,000.
Retained earnings reported, prosperity period, 844,424,000.
Retained earnings adjusted, prosperity period, 865,823,000.

in the cycle. It should be noted also that much of the \$404,-717,000 decrease in surplus reserves is a result of write-offs and adjustments and does not appear because of dividend payments.

Table 24 shows the frequency and extent of asset liquidation.

TABLE 24—EXTENT OF ASSET LIQUIDATION, DEPRESSION PERIOD
Seventeen Companies Paying Depression Dividends
Substantially in Excess of Reported Income

Percentage Liquidation	Per Cent of Companies								
	Cash	Liquid Securi- ties	Receiv- ables	Inven- tories	Total Current Assets	Current Liabili- ties	Net Working Capital	Invest- ments	Plant Assets
0- 9.9	12	23	6	-0	12	6	17	12	47
10-19.9	6	-0	12	24	24	17	17	18	35
20-29.9	12	-0	12	6	24	12	30	6	*
30-39.9	6	12	23	29	28	17	24	6	*
40-49.9	6	6	6	12	12	-0	12	18	*
50-59.9	23	-0	12	6	-0	12	-0	-0	*
60-69.9	6	-0	23	6	-0	12	-0	-0	*
70-79.9	-0	-0	-0	-0	-0	12	-0	-0	*
80-89.9	12	6	-0	-0	-0	-0	-0	-0	*
90-99.9	-0	12	-0	-0	-0	-0	-0	-0	*
(Increases)	17	41	6	17	-0	12	-0	40	6
Totals	100	100	100	100	100	100	100	100	88

* 12 per cent of the companies wrote down plant assets substantially.

tion during the poorest years.² The liquidation rarely reached 40 per cent of the 1930 amounts while the degree of liquidation in the various assets followed no particular pattern among the companies.

It is interesting to note that marketable securities and investments in related companies actually increased in 41 per cent of the cases during the poorest years. This record is exactly as it should be. Security prices are lower during the depression years than at any other time and if securities are to be held at all they should be purchased at just such times. Inventories and receivables are the assets most often liquidated during the depression according to data presented in Table 24.

It is hardly feasible to show by percentages or other relatives exact portions of the earning deficiency provided by liquidating various assets. It is possible to state, in general, how earning deficiencies were met in each case, and in Table 25 each company is listed by name showing in order of magnitude

² The degree of asset liquidation is computed by dividing the 1931-33 or 1931-34 decrease by the 1930 year-end asset figures.

the three assets liquidated which provided most of the funds to meet the earning deficiency. In most cases the first two assets named account for a very large part of the total liquidation. Inventories provided much of the earning deficiency in more than two-thirds of the cases, while liquid assets supplied an important part of the deficiency in 35 per cent of the cases. Receivables were liquidated by most companies, and plant assets made an important contribution in at least 70 per cent of the cases.

TABLE 25—ASSETS LIQUIDATED TO GREATEST EXTENT, DEPRESSION PERIOD
Seventeen Companies Paying Depression Dividends Substantially
in Excess of Reported Earnings

Company	Assets Arranged According to Degree of Liquidation		
	1	2	3
May Department Stores Co.	Inventories	Receivables	Plant assets
J. C. Penney Co.	Inventories	New issues	Plant assets
Sears, Roebuck & Co.	Receivables	Inventories	Plant assets
American Tobacco Co.	Liquid assets	New issues	Plant assets
R. J. Reynolds Tobacco Co.	Liquid assets	New issues	Receivables
General Cigar Company, Inc.	Inventories	Plant assets	Receivables
Otis Elevator Co.	Inventories	Receivables	Plant assets
General Electric Co.	Liquid assets	Inventories	Receivables
Chrysler Corp.	Plant assets	Inventories	Receivables
Firestone Tire & Rubber Co.	Liquid assets	Inventories	Sundry
Inland Steel Co.	New issues	Liquid assets	Investments
Nash-Kelvinator Corp.	Liquid assets	Plant assets	Receivables
Packard Motor Car Co.	Plant assets	Inventories	Liquid assets
Timken Roller Bearing Co.	Plant assets	Inventories	Sundry
Union Carbide & Carbon Corp.	Liquid assets	Inventories	Receivables
American Brake Shoe & Foundry Co.	Receivables	Plant assets	Liquid assets
Electric Storage Battery Co.	Receivables	Inventories	Plant assets

*Eighteen Companies that Paid
Dividends after Losses*

When the record of these eighteen companies that paid at least \$1,000,000 of depression dividends (after reporting depression losses) is assembled in aggregate, we find approximately \$700,000,000 of prosperity profits reinvested, 30 per cent going into working capital and 68 per cent invested in plant assets. It should be noted that the working capital increases took place in receivables and inventories entirely while

liquid assets shifted slightly from marketable securities to cash. In percentage terms, the asset structure of 1921 and 1930 year ends is almost identical. (See Table 26.)

TABLE 26—ASSET EXPANSION AND LIQUIDATION, 1921-33
Eighteen Companies Paying Substantial Depression
Dividends after Operating Losses
(Amounts in thousands of dollars)

Source or Application of Funds	1921		1930		1933		1931-33 Increase or Decrease
	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent	
Cash	\$ 194,710	17	\$ 265,764	20	\$ 183,149	18	\$ -82,615
Marketable securities	224,020	20	154,363	11	148,499	14	-5,864
Receivables	291,397	26	461,629	34	245,863	24	-215,766
Inventories	648,489	58	774,948	58	592,379	53	-182,569
Total current assets	\$1,358,615	121	\$1,656,704	123	\$1,169,894	114	-486,814
Current liabilities	236,106	21	309,371	23	142,988	14	\$-166,383
Net working capital	\$1,122,511	30	\$1,347,333	30	\$1,026,907	26	\$-320,431
Investments	66,061	2	144,164	3	120,492	3	-23,672
Sundry assets	71,727	2	86,056	2	27,662	1	-58,394
Intangible assets	84,717	2	78,204	1	24,286	1	-53,918
Plant assets	2,426,450	64	2,903,144	64	2,721,637	69	-88,101
Total	\$3,772,005	100	\$4,558,901	100	\$3,920,984	100	
Unexpended depreciation							93,406
Total liquidation							\$ 637,922
New security issues							-13,654
Total deficiency							\$ 624,268
Write-offs against capital stock							13,424
Adjusted earning deficiency							\$ 610,844*
Surplus reserves	\$1,245,870		\$1,502,796		\$ 940,307		-562,489
Losses					208,185		
Interest and dividends					300,653		
Write-downs and adjustments					53,651		
					\$1,502,796		
Capital stock revaluations							47,995
							\$ 610,844

* Earning deficiency adjusted, depression period, \$610,844,000.
Earning deficiency reported, depression period, 489,803,000.
Retained earnings reported, prosperity period, 708,613,000.
Retained earnings adjusted, prosperity period, 695,343,000.

In aggregates, the depression record shows that every class of asset was liquidated in order to meet the earning deficiency. Receivables and inventories provided perhaps 50 per cent of the funds for the depression deficiency after liquidating the accounts payable, and all other assets contributed to supply the balance.

In each individual case and in aggregates, it is obvious that prosperity earnings generally were reinvested in all classes of assets but primarily in receivables, inventories, and plant. During depression periods when sales decline it is natural and inevitable that physical inventory needs will decline and unit costs will be lower, hence inventory investment is liquidated. Receivables likewise are collected or written off as uncollectible and the collection process always provides some funds to meet an operating deficiency. In like manner, plant improvements and expansion during the upswing make productive capacity excessive during the slump and further plant expansion and even full maintenance is not desirable. Depreciation must be recognized even during the lean years when selling prices do not recover all the costs of operation and it is therefore very probable that plant assets will be liquidated in the process of meeting the earning deficiency.

The degree of asset liquidation made by this group of durable goods manufacturers that operated at a loss during depression years is summarized in Table 27. Only 20 per cent

TABLE 27—EXTENT OF ASSET LIQUIDATION, DEPRESSION PERIOD
Eighteen Companies Paying Substantial Depression
Dividends after Operating Losses

Percentage Liquidation	Per Cent of Companies								
	Cash	Liquid Securi- ties	Receiv- ables	Inven- tories	Total Current Assets	Current Liabili- ties	Net Working Capital	Invest- ments	Plant Assets
0- 9.9	-0	5	-0	-0	-0	-0	5	-0	39
10-19.9	11	-0	6	17	6	-0	11	-0	28
20-29.9	-0	11	-0	28	28	22	29	6	-0
30-39.9	11	-0	28	22	33	11	28	-0	5
40-49.9	22	4	33	11	17	17	11	-0	-0
50-59.9	-0	-0	17	-0	11	6	-0	11	-0
60-69.9	-0	-0	11	17	5	11	5	-0	-0
70-79.9	17	6	-0	-0	-0	11	-0	-0	-0
80-89.9	6	-0	5	-0	-0	17	6	-0	-0
90-99.9	-0	11	-0	-0	-0	5	-0	-0	-0
Write-downs and small amounts (Increases)	-0	24	-0	-0	-0	-0	-0	33	28
	33	39	-0	5	-0	-0	5	50	-0
Totals	100	100	100	100	100	100	100	100	100

of the companies reduced the cash account more than 40 per cent and one-third of these depression losers actually increased their cash balances. Marketable securities were liquidated in degree much less than cash. Only four of the eighteen companies

reduced marketable securities as much as 30 per cent while 39 per cent of the enterprises added to their investment in securities.

In more than 60 per cent of the cases receivables decreased between 30 and 50 per cent and in a third of the cases the shrinkage was more than 50 per cent. The inventory shrinkage was more than 50 per cent in only two cases, but in absolute amounts inventory liquidation was substantial in most instances. Current liabilities were reduced to a minimum during the depression, one-half the concerns reducing current liabilities more than 50 per cent while all except one company reduced current payables at least 20 per cent. Investments in nonmarketable securities were liquidated in very few cases as one might suspect. Plant assets were liquidated by practically every company and this liquidation supplied an important part of the earning deficiency but did not absorb a large fraction of total plant costs.⁸ For representative company records see Appendix III B.

Shifts in asset classifications, such as marketable securities to investments, and revaluations and write-downs, make it difficult to specify that liquidation of particular assets provided a certain percentage of the earning deficiency. By observation, some indication can be given as to which assets provided most of the earning deficiency, however, and in Table 28 the companies are listed by name, showing the three assets which provided most of the deficiency.

Receivables, inventories, and plant assets were liquidated most frequently and proved to be the greatest source of "surplus liquidation," while 44 per cent of the companies relied upon a balance of cash and marketable securities to supply much of the depression deficiency.

Ten Companies that Paid No Depression Dividends

The analysis of thirty-five companies just examined shows that profitable companies invested earnings in a variety of ways,

⁸ There is some reason to assume that depreciation charges were reduced below a reasonable rate and that plant liquidation was in reality more extensive than reported figures suggest.

TABLE 28—ASSETS LIQUIDATED TO GREATEST EXTENT, DEPRESSION PERIOD
 Eighteen Companies Paying Substantial Depression
 Dividends after Operating Losses

Company	Assets Arranged According to Degree of Liquidation		
	1	2	3
American Car & Foundry Co.	Receivables	Inventories	Investments
American Locomotive Co.	Liquid assets	Inventories	Receivables
Allis-Chalmers Manufacturing Co.	Receivables	Inventories	Liquid assets
J. I. Case Co.	Receivables	Inventories	Plant assets
Deere & Co.	Receivables	Plant assets	Inventories
International Harvester Co.	Receivables	Plant assets	None
Worthington Pump & Machinery Corp.	Liquid assets	Receivables	Inventories
Westinghouse Electric & Manufacturing Co.	Receivables	Inventories	Liquid assets
B. F. Goodrich Co.	Inventories	Receivables	Plant assets
Bethlehem Steel Co.	Inventories	Receivables	Plant assets
United States Steel Corp.	Liquid assets	Inventories	Plant assets
Hudson Motor Car Co.	Liquid assets	Inventories	Plant assets
Mack Trucks, Inc.	Liquid assets	Inventories	Plant assets
Reo Motor Car Co.	Liquid assets	Inventories	Plant assets
California Packing Corp.	Liquid assets	Receivables	Inventories
Consolidated Cigar Corp.	Inventories	Receivables	None
Crucible Steel Co. of America	Inventories	Plant assets	Liquid assets
Wheeling Steel Corp.	Liquid assets	Inventories	Plant assets

chiefly in receivables, inventories, and plant facilities, and that earning deficiencies were met by liquidating these same assets.

Ten companies included in the present sample paid no dividends of any consequence during the depression and in most cases operated at a loss. The railway equipment, steel, machinery, and other manufacturers in this category had a generally poor 1922-30 earning record and in most cases the dividends paid even in the best years were comparatively small amounts. These ten companies as a whole operated at a loss for fifteen years, yet they are still important companies in their respective industries. How is it possible to operate below cost for long periods of time and what sort of surplus reserves did these concerns have in order to withstand the rigorous early thirties after a series of operating losses through the twenties?

We find little difference between the asset structure of the ten poor companies and the more profitable companies already

examined. A deficit arose in a number of cases, to be sure, but the assets were little affected by the deficit as such and the particular companies were able to continue operations without any surplus. The limited amount of 1922-30 expansion occurred chiefly in plant assets, although inventories and cash show extensive increases. The financial records of representative companies are summarized in Appendix III C.

All assets were liquidated in varying degree during the depression, a feature observed in performances of the more profitable concerns. The asset structure at terminal points of the cycle is proportionately very similar as shown by the aggregate financial summary in Table 29.

TABLE 29—ASSET EXPANSION AND LIQUIDATION, 1921-33
Ten Companies Having Small Prosperity Earnings and
Paying Only Nominal Depression Dividends
(Amounts in thousands of dollars)

Source or Application of Funds	1921		1930		1933		1931-33 Increase or Decrease
	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent	
Cash	\$ 19,108	12	\$ 43,376	23	\$ 29,662	25	\$ -13,714
Marketable securities	27,115	17	12,432	6	2,151	2	-10,284
Receivables	69,924	44	68,958	36	35,172	30	-33,786
Inventories	124,453	79	136,542	72	83,334	71	-53,208
Total current assets	\$240,602	152	\$261,308	137	\$150,315	128	\$-110,994
Current liabilities	82,755	52	71,027	37	33,517	28	-37,510
Net working capital	\$157,845	29	\$190,281	23	\$116,802	19	\$ -73,482
Investments	21,418	4	63,492	8	65,562	11	2,069
Sundry assets	16,043	3	16,003	2	12,283	2	-3,720
Intangible assets	23,222	4	78,832	10	7,774	1	-71,058
Plant assets	333,797	60	485,236	57	398,345	67	-26,324
Total	\$552,326	100	\$833,844	100	\$600,764	100	
Unexpended depreciation							60,567
Total liquidation							\$ 233,082
Intangible assets written off							58,925
Capital issues retired							64,099
Adjusted earning deficiency							\$ 110,058*
Surplus reserves	\$108,881		\$157,013		\$ 50,645		-106,368
Losses					36,768		
Interest and dividends					34,389		
Write-downs and adjustments					35,211		
Capital stock revaluations and adjustments to capital surplus					\$157,013		106,368
							3,690
							\$ 110,058

* Earning deficiency adjusted, depression period, \$110,058,000.
Earning deficiency reported, depression period, 71,102,000.
Retained earnings reported, prosperity period, 69,925,000.
Retained earnings adjusted, prosperity period, 6,141,000.

† See Appendix III C, United States Rubber Company.

Table 30 shows the frequency and degree of liquidation in each asset. Forty per cent of the companies increased the cash accounts during the poorest years and only 20 per cent of the group reduced cash 50 per cent or more. Among these ten companies with poorest dividend records, liquid securities were not important in the asset structure in 60 per cent of the cases, but where a company owned such securities they were liquidated during the depression. Receivables and inventories were liquidated from 20 to 50 per cent, a record very similar to other

TABLE 30—EXTENT OF ASSET LIQUIDATION, DEPRESSION PERIOD
Ten Companies Having Small Prosperity Earnings and
Paying Only Nominal Depression Dividends

Percentage Liquidation	Per Cent of Companies								
	Cash	Liquid Securities	Receivables	Inventories	Total Current Assets	Current Liabilities	Net Working Capital	Investments	Plant Assets
0- 9.9	-0	-0	10	-0	-0	-0	-0	10	40
10-19.9	-0	-0	20	10	20	20	20	-0	20
20-29.9	10	-0	10	30	10	10	10	-0	10
30-39.9	10	-0	-0	20	10	-0	-0	10	-0
40-49.9	20	-0	10	10	30	10	30	10	-0
50-59.9	10	-0	10	10	30	10	10	10	-0
60-69.9	10	-0	30	10	-0	10	10	-0	-0
70-79.9	-0	20	-0	-0	-0	20	10	-0	-0
80-89.9	-0	-0	-0	-0	-0	10	-0	-0	-0
90-99.9	-0	20	-0	-0	-0	-0	-0	-0	-0
Very small liquidation	-0	60	-0	-0	-0	-0	-0	30	-0
Write-downs (Increases)	-0	-0	-0	-0	-0	-0	-0	-0	30
40	-0	-0	10	10	-0	10	10	30	-0
Totals	100	100	100	100	100	100	100	100	100

groups observed. Investments in securities of related companies were of little importance but in several instances increased during the poorest years,⁴ and plant asset liquidation was substantial in amount in most cases.

In Table 31 each company is listed by name, showing in order of magnitude the three assets which provided most of the earning deficiency. Receivables, inventories, and plant facilities were liquidated most often to provide an important portion of the funds to meet the earning deficiency of the early thirties, while cash and marketable securities were the most important source of funds in 30 per cent of the cases.

⁴ Liquid securities may have been reclassified as "investments" because of drastic declines in market values and restricted marketability.

TABLE 31—ASSETS LIQUIDATED TO GREATEST EXTENT, DEPRESSION PERIOD
 Ten Companies Having Small Prosperity Earnings and Paying
 Only Nominal Depression Dividends

Company	Assets Arranged According to Degree of Liquidation		
	1	2	3
Gulf States Steel Corp.	Plant assets	Inventories	Receivables
American Cyanamid & Chemical Corp.	Inventories	Sundry assets	Receivables
Baldwin Locomotive Works	Liquid assets	Receivables	Inventories
Lima Locomotive Works, Inc.	Liquid assets	Plant assets	None
New York Air Brake Co.	Plant assets	Inventories	Receivables
Chicago Pneumatic Tool Co.	Inventories	Plant assets	Receivables
National Acme Co.	Liquid assets	Inventories	Plant assets
United States Tire Co.	Inventories	Receivables	Plant assets
Republic Steel Corp.	Plant assets	Inventories	Liquid assets
Mullins Manufacturing Corp.	Inventories	Receivables	None

Summary

The detailed investigation of asset accumulation and liquidation indicates that a particular company may invest the surplus reserves in many combinations or fashions and that depression earning deficiencies may be met by liquidating whatever assets economic forces permit or make feasible. In general, however, when companies are operating profitably a considerable portion of the reported income necessarily remains invested in receivables, inventories, and plant facilities as well as in the more liquid assets. The same economic forces which cause these assets to increase during the best years cause a liquidation and shrinkage of those values during recessions.

In Table 32 the degree and nature of asset liquidation during the depression years is summarized in a way designed to compare general tendencies of three groups. There appear to be very minor differences in asset liquidation among the companies with such different profit and dividend records.

TABLE 32—PERCENTAGE DISTRIBUTION OF COMPANIES BY ASSETS LIQUIDATED TO GREATEST EXTENT, THREE GROUPS OF COMPANIES

CHAPTER 6

CONCLUSIONS

The merits of saving for a rainy day and the effectiveness of corporate surplus in meeting financial requirements of depression periods have been widely publicized and accepted, but in practice it is questionable whether corporate reserves assure wage and dividend payments during the poor years. It is possible that a period of disinvesting, dishoarding, and real capital liquidation made possible in large part by surplus accumulation, may result in less employment of all factors of production during recession periods and hence the payment of less wages and dividends.

Increased sales volume and a rising price level during the upswing of a business cycle require additional investments in receivables, inventory, and plant assets. The saving is therefore semiautomatic, and it is doubtful if corporate management exercises deliberate choice in the administration of much of the reported annual income. Day to day expenditures must be made to maintain the flow of revenue, and at periodic time intervals dividend payments are considered. On such occasions the cash balance and liquid position are likely to be of much greater importance than accrued net income and a large surplus balance.

Since surplus is ordinarily invested in increased productive facilities there is no *fund* which can be drawn upon for dividend payments when revenue is inadequate to meet operating expenditures. Decline in business activity forces a reduction and liquidation in receivables, inventory, and plant facilities. Selling prices do not recover all the costs of operation during the recession periods, due chiefly to uncollectible accounts, declines in inventory values, and depreciation of plant facilities that cannot be operated to efficient capacity. Management is forced to discharge laborers, reduce wage payments, sell the existing inventories at lower prices, and reduce expenditures for plant maintenance. Proceeds from sales may more than recover out of pocket expenditures during the liquidating period and still

fail to cover the total costs of production. This phenomenon explains how losses are reported while liquid position is maintained or improved and while the surplus balance declines.

If depression period operating revenue exceeds current expenditures by virtue of the fact that prosperity profits were used to build up a surplus reserve invested in receivables, inventories, and plant equipment, then these productive facilities may be liquidated at prices below cost and the so-called surplus may be utilized to pay dividends to stockholders and thus disburse income that was withheld during profitable years. Neither managers nor stockholders would knowingly subscribe to such a policy.

The purpose of this study has been to show the extent to which depression dividends were paid from surplus reserves created during the twenties, to show how those reserves were reinvested, and how depression losses were met.

The following observations seem warranted:

1. Many of our industrial corporations financed large expansion programs during the twenties by reinvesting profits and paying scanty dividends.

2. Depression dividends were paid by companies that continued to operate profitably, and only limited amounts were paid in excess of earnings. Very moderate dividends were paid by companies reporting losses, with a few outstanding exceptions.

3. Nineteen of the companies (26.4 per cent of the sample) increased common dividend payments during the poorest years, but these corporations continued profitable operations throughout the depression period; charges to surplus were the exception; and in aggregate amount a very small proportion of their dividends came from surplus.

4. The corporations that found it necessary to charge dividends to surplus made drastic reductions in the dividend rates and although the aggregate amount of dividends paid from surplus is large in a number of cases, these payments are small when compared with earnings withheld during the twenties.

5. There is no apparent relation between earnings reinvested during the twenties and dividends paid during the early thirties.

6. Almost one-half of the companies lost a much greater portion of the 1922-30 withheld earnings than they paid to stockholders in cash dividends during the depression years.

7. Corporate surplus resulting from reinvested profits is not a cash fund but is reflected in a cross section of all the assets, and property acquired from retained earnings cannot be distinguished from assets acquired through the sale of stocks or bonds or by other methods of financing.

8. In general, industrial corporations retained some 40 per cent of the 1922-30 net income and this they invested chiefly in inventories, receivables, and plant facilities, with moderate increases in cash and marketable securities. The data demonstrate that these same assets were liquidated during the poorest years and this forced liquidation probably accounts for most of the reported losses as well as providing funds to meet the operating deficiencies.

APPENDIXES

APPENDIX I

INDUSTRIAL CLASSIFICATION OF THE SAMPLE SHOWING NAME OF COMPANY AND ASSETS INVESTED BY EACH COMPANY

Industry	Assets Invested (Amounts in thousands of dollars)		
	1921	1928	1936
<i>Railway equipment manufacture</i>			
American Brake Shoe and Foundry Co.	\$ 23,194	\$ 32,408	\$ 30,608
American Car and Foundry Co.*	136,663	121,058	96,584
American Locomotive Co.*	85,630	108,093	56,856
Baldwin Locomotive Works*	81,931	69,403	73,979
Lima Locomotive Works, Inc.	16,115	13,773	9,034
New York Air Brake Co.	14,457	16,253	12,872
Total in sample (6)	\$ 357,990	\$ 360,988	\$ 279,933
<i>Machinery manufacture</i>			
Allis-Chalmers Manufacturing Co.*	60,432	63,547	79,003
Chicago Pneumatic Tool Co.	18,696	19,312	20,038
J. I. Case Co.	35,179	42,636	42,250
Deere & Co.*	87,445	91,983	94,424
Fairbanks, Morse & Co.	26,265	39,039	30,840
International Harvester Co.*	266,672	346,120	398,874
National Acme Co.	33,481	10,679	5,446
Otis Elevator Co.	27,167	50,403	39,849
Owens-Illinois Glass Co.	34,130	32,898	72,975
Pittsburgh Plate Glass Co.*	64,388	96,124	114,439
Worthington Pump & Machinery Corp.	32,915	28,692	23,715
Total in sample (11)	\$ 686,770	\$ 821,433	\$ 921,853
<i>Electrical equipment</i>			
General Electric Co.*	337,010	460,455	378,869
Westinghouse Electric & Manufacturing Co.*	167,070	233,690	203,735
Total in sample (2)	\$ 504,080	\$ 694,145	\$ 582,604
<i>Rubber manufacture</i>			
Firestone Tire & Rubber Co.*	66,211	110,127	147,015
B. F. Goodrich Co.*	88,801	116,224	139,092
Goodyear Tire & Rubber Co.*	163,085	207,666	196,029
United States Rubber Co.*	323,653	284,206	172,365
Total in sample (4)	\$ 641,750	\$ 718,223	\$ 654,501

APPENDIX I—Cont'd.

Industry	Assets Invested (Amounts in thousands of dollars)		
	1921	1928	1936
<i>Iron and steel manufacture</i>			
Bethlehem Steel Co.*	\$ 336,422	\$ 643,356	\$ 656,576
Crucible Steel Co. of America*	113,463	118,385	110,524
Gulf States Steel Corp.	16,747	25,383	30,742
Inland Steel Co.*	49,856	95,176	137,644
Republic Steel Corp.*	106,813	151,435	343,950
United States Steel Corp.*	2,339,143	2,442,030	1,863,977
Wheeling Steel Corp.*	87,474	125,098	118,825
Total in sample (7)	\$3,079,918	\$3,600,863	\$3,262,238
<i>Automobile manufacture</i>			
Chrysler Corp.*	56,515	194,172	210,676
General Motors Corp.*	413,705	1,030,162	1,196,435
Hudson Motor Car Co.	15,189	68,237	42,779
Mack Trucks, Inc.	29,250	68,497	46,038
Nash-Kelvinator Corp.	26,111	63,479	36,544
Packard Motor Car Co.	58,759	75,177	58,030
Reo Motor Car Co.	18,932	37,297	11,212
Total in sample (7)	\$ 618,461	\$1,537,021	\$1,601,714
<i>Automobile equipment manufacture</i>			
Electric Storage Battery Co.	41,029	47,084	38,713
Motor Wheel Corp.	9,244	15,409	12,452
Mullins Manufacturing Corp.	4,281	7,898	3,563
Spicer Manufacturing Corp.	15,834	13,416	9,863
Timken Roller Bearing Co.	19,105	45,523	46,745
Total in sample (5)	\$ 89,493	\$ 129,330	\$ 111,336
<i>Chemical manufacture</i>			
Air Reduction Company, Inc.	9,952	24,429	41,315
Allied Chemical & Dye Corp.*	205,355	262,242	225,046
American Cyanamid & Chemical Corp.	16,812	23,461	62,858
Commercial Solvents Corp.	2,240	10,097	20,225
E. I. du Pont de Nemours & Co.*	245,339	419,204	622,556
Mathieson Alkali Works, Inc.	11,709	17,923	26,205
Union Carbide & Carbon Corp.*	200,042	236,837	290,313
Total in sample (7)	\$ 691,449	\$ 994,193	\$1,288,518
<i>Metal container</i>			
American Can Co.*	134,995	183,262	211,374
Continental Can Company, Inc.*	26,763	63,161	104,734
Total in sample (2)	\$ 161,758	\$ 246,423	\$ 316,108

APPENDIX I—Cont'd.

Industry	Assets Invested (Amounts in thousands of dollars)		
	1921	1928	1936
<i>Food processing</i>			
Borden Co.*	\$ 60,215	\$ 119,284	\$ 123,894
California Packing Corp.	44,299	55,950	56,334
Corn Products Refining Co.*	133,623	121,327	119,912
Hershey Chocolate Corp.	43,265	22,084	25,635
Loose-Wiles Biscuit Co.	20,089	26,203	28,890
National Biscuit Co.*	83,188	120,842	123,979
Pillsbury Flour Mills Co.	10,992	128,626	27,245
Quaker Oats Co.	40,322	61,566	63,518
Total in sample (8)	\$ 435,993	\$ 555,882	\$ 569,407
<i>Mercantile merchandising</i>			
Hart, Schaffner & Marx	24,885	29,557	9,005
S. S. Kresge Co.*	31,081	100,657	120,382
May Department Stores Co.	45,412	73,744	60,937
J. C. Penney Co.	11,433	49,106	82,327
Sears, Roebuck & Co.*	184,819	209,282	275,292
F. W. Woolworth Co.*	102,918	153,516	201,224
Total in sample (6)	\$ 400,548	\$ 615,862	\$ 749,167
<i>Tobacco and beverage</i>			
American Tobacco Co.*	190,462	221,206	255,412
Coca-Cola Co.	35,510	47,185	78,406
Consolidated Cigar Corp.	12,034	31,214	16,097
General Cigar Company, Inc.	39,041	31,307	25,372
Liggett & Myers Tobacco Co.*	137,244	181,403	175,979
R. J. Reynolds Tobacco Co.*	104,488	156,260	146,605
Wm. Wrigley, Jr. Co.	29,804	52,435	60,713
Total in sample (7)	\$ 548,583	\$ 621,390	\$ 758,584

* Among America's two hundred largest industrials, most of them being mentioned by Berle and Means in *The Modern Corporation and Private Property*.

APPENDIX II

SOME PROBLEMS IN INCOME DETERMINATION

The necessity for interpretation of surplus adjustments will be emphasized if we observe some actual surplus accounting. In 1921 Sears Roebuck reported a loss of \$16,000,000 although a profit of over \$8,000,000 on the sale of real estate was credited direct to surplus. In 1933 Woolworth reported total income of some \$28,000,000. In addition a profit of \$1,970,561.13 was made on the sale of securities and this profit was credited direct to surplus. In 1931 American Cyanamid reduced the stated value of common stock \$39,035,000 thus creating a capital surplus. Among other things the plant assets were written down \$19,995,672, patents and process written down \$12,268,468, and investments in securities decreased by \$3,502,470. In 1929 Commercial Solvents charged to earned surplus \$1,725,240 which represented the undepreciated value of plant assets, and on order of the board of directors wrote off against surplus the cost of stock acquired in Commercial Pigments Corporation. In 1934 this stock was sold at a figure far above cost and \$4,525,510 was credited to surplus.

In 1926 and again in 1934 Inland Steel dismantled plants and charged the respective unrecovered costs of \$1,201,000 and \$1,030,000 to surplus. In 1932 Consolidated Cigar reported profits of \$114,000 but made a charge to surplus of \$1,244,000 due to a reduction in inventory value of leaf tobacco. In 1935 United States Steel reduced plant assets by about \$85,000,000 as a result of obsolescence and reduced the plant properties another \$182,000,000 through a credit to a general reserve for amortization of property investment valuations.

It seems important to emphasize that these adjustments are a part of the business operations and affect fortunes of the stockholder equally as much as other profits or expenses. It is also important to differentiate between surplus entries arising from a receipt or disbursement of cash, those which affect subsequent

income accounts through arbitrary revaluation of assets, and those which are nominal in nature, such as goodwill write-offs when the goodwill was originally stock discount if correctly interpreted.

In order to show how depression losses and dividends were met, it is necessary to distinguish between expenses which require a current expenditure and those which represent consumption of assets acquired in previous periods. The most important of these expenses that require no current expenditure is depreciation.

Unexpended Depreciation

Much of the 1922-30 retained income was invested in plant assets, as shown in Chapter 4. The process of liquidating plant assets and consequent depreciation charges inherent in reporting such liquidation gives rise to much confusion, of which the following excerpts are typical.

In *The Annalist* of January 14, 1938, Alexander Sachs presents data which show that durable goods industries financed their recovery primarily from depreciation.¹ A few weeks later a subscriber to *The Annalist* professed inability to understand the process, expressing his doubts as follows:

As a new subscriber I have been mystified by some remarkable statements in an article on page 35 of your Jan. 14 issue. The author, Alexander Sachs, discusses "How Industry Financed Recovery" and states "Depreciation remained the chief source of funds." To a layman, even one with considerable business experience, this sounds incomprehensible, if not fantastic. Perhaps you will help me to obtain a clarification.

Dr. Sachs lists the three main purposes for which industry has required funds. For these purposes real money has been clearly necessary. Yet he says this money was obtained from "depreciation." How can an arbitrary bookkeeping entry provide real money or directly affect the physical wealth of a corporation in any way?²

¹ A. Sachs, "Summary of a Comprehensive Financial Analysis of the Causes of the Slump," *The Annalist*, January 14, 1938, p. 35.

² C. Pennington, "Depreciation as a Source of Financing," *The Annalist*, February 25, 1938, p. 292.

In explaining this phenomenon, Alexander Sachs says:

In sum, depreciation is one constituent of appropriated income and is just as much "real money" as the net income itself. It is, in fact, that portion of the income which is segregated so as to serve a dual function: accounting-wise, it is an allocation for wear and tear of the equipment over its life; management-wise—that is, from the standpoint of the active manager of the business who is concerned with conserving his property and utilizing the wear and tear allocation for maintaining the dynamic efficiency of the whole plant or business—it is a source of funds for physical reinvestment and for other purposes of capital formation.³

Mr. Pennington accepted the explanation of the depreciation charge as a source of funds in the following language:

The fact remains that if the companies listed by Dr. Sachs had elected, in any year, to charge off ten million more as depreciation than they did charge off, they would not thereby have added one dime to the total of their funds available for plant expansion or for increasing inventories or receivables. Therefore, to speak of depreciation as a source of funds, however correct as a step in accounting practice, has no significance in a discussion of fundamentals.⁴

One must admit that the explanation given is not very convincing even if correct. Unexpended depreciation is an unfortunate expression intended to describe a process of plant liquidation which recognizes the expense of plant use without a corresponding expenditure for plant assets within the period. Investment in plant can be liquidated just as can government bonds, inventories, or any other asset. The sale of government bonds will provide funds, whether sold above or below cost. A stock of merchandise can be liquidated at a price below cost without replenishment of the inventory and presumably this process would provide liquid funds available for any purpose whatsoever. It is not the expense or cost of merchandise that produces the funds, however, but the *revenue* which arises when the merchandise is sold.

Plant assets are liquidated in a manner quite like inventory liquidation except for differences in periodicity. When sales are

³ A. Sachs, *The Annalist*, February 25, 1938, p. 292.

⁴ Pennington, *op. cit.*

made at a profit, the cost elements of merchandise, store supplies, advertising, rent, salaries, and other assets are liquidated and replaced by cash or receivables in amount sufficient to result in a net asset increase. When sales are made at a price which does not recover *all* costs, certain assets are liquidated as usual in the sales process, but a net asset decrease results—otherwise the sale price would not be below cost. It is not possible to determine *which* cost factor is not recovered in the selling price, even though the ranking of costs is a common practice. Most expense items are computed by actual count of units used and there is little question concerning the amount of such expense or in what operating period it belongs. It is not feasible to measure the inches of floor space worn from a building or the molecules of wear on the roof of a factory, yet the cost of these items must be recovered in the selling price. Assets received measure the revenue volume and depreciation accounting in no way can affect the assets already received.

A moment of reflection will convince even the most casual observer that the harvest has already been made and the "pumpkins are in the cellar" before depreciation is entered on the books. After a year of operations and at the close of a fiscal period, all cash is in the bank, all uncollected accounts receivable on the books, the inventory on the shelves, and the buildings, machinery, and equipment on their foundations. A book-keeping entry which debits Depreciation Expense and credits Allowance for Depreciation changes the situation not one iota. No fund results which can be directed to plant maintenance or to any other use. While depreciation is a very real expense, it produces no fund or stream of current assets ready for reinvestment any more than the labor expense, rent expense, or delivery expense. Assets available for investment come from revenue produced or from income, and measure the amount of revenue or income. To be sure, there may be a liquidation of fixed assets through operations, but it does not arise from the depreciation charge. The process would proceed exactly in the same way and the amount of liquidation would be precisely the same whether or not any depreciation charge is made—unless one wants to argue that short run costs as computed set selling prices and hence determine profits. Unexpended depreciation is, therefore,

the estimated cost of plant assets liquidated and included in the sales price of merchandise sold during the year.

Computation of unexpended depreciation from reports to stockholders is in many cases fraught with inaccuracies and must of necessity rest at times upon arbitrary assumptions due to lack of information. If \$8,000 is charged to depreciation and a \$5,000 expenditure is capitalized for plant expansion, \$3,000 may be looked upon as unexpended depreciation. In a more realistic sense, wear and tear, obsolescence, and other factors entering the depreciation expense exceed the current replacement to physical assets and to that extent plant assets have been sold in the operating process. In very unusual cases reports to stockholders disclose both capital expenditures and depreciation expenses. In general, however, information is limited to the annual depreciation charge, allowance for depreciation, and plant asset totals. In a number of cases only the net plant asset total is given and in such circumstances unexpended depreciation is pure estimate and assumption.

Where accounting for plant assets follows some consistent principle it is possible to compute unexpended depreciation with a reasonable degree of satisfaction.⁵ The unexpended

⁵ If no units of equipment are discarded or revalued, the net change in plant assets plus depreciation charge represents capital outlay. If in 1934 plant assets are presented in this manner:

Plant	Allowance for Depreciation
400,000	100,000

and the 1934 depreciation charge is \$50,000 and \$30,000 is expended for new construction, the net plant asset decrease of \$20,000 represents unexpended depreciation and could be discovered by mere observation of the accounts which would appear thus:

Plant	Allowance for Depreciation
400,000	100,000
30,000	50,000

The net decrease in balance sheet plant account under these conditions would be due to unexpended depreciation. If a unit which cost \$20,000 and has a book value of \$2,000 is disposed of with no scrap value, the net decrease in book value overstates unexpended depreciation to the extent of the \$2,000 unrecovered cost. If charged to surplus the facts may be apparent and proper adjustment can be made, but in condensed reports the details of surplus analysis are seldom revealed. In event plant assets are disposed of at a gain over the undepreciated book figure and if the gain results from excessive depreciation, then any amounts recognized as unexpended depreciation have been overstated. To make this point clear,

depreciation figures in the Earnings and Dividends tables have a tendency to be overstated slightly, but the overstatement probably is negligible.⁶

Surplus Reserve Adjustments

Thus far complications suggested in relation to the measurement of year to year income and funds available for dividends have been confined to earned surplus adjustments and unexpended depreciation. Debits and credits to surplus, however, do not explain all the discrepancy between balance sheet changes in common stock equity and aggregate reported retained earnings plus or minus stock issued or retired. One practically despairs of preparing an accurate source and disposition of funds statement from reports to stockholders because of the *reserve* accounts and lack of information concerning changes therein. It is necessary in a historical study of retained earnings to classify reserve accounts into asset contras, liabilities, and proprietary reserves. The following discussion is intended to suggest the problem as

assume machine X cost \$80,000 in 1930 and a depreciation rate is designed to recover the cost in four years with no scrap value. If no other expenditures were made, unexpended depreciation of \$20,000 would be recorded each year. If at the end of four years the machine is sold for \$25,000 it is clear that unexpended depreciation has been overstated. These details usually are not revealed in reports to stockholders, hence there may be more or less error in accepting net plant decreases as unexpended depreciation even after correcting for all visible surplus entries. The unexpended depreciation as presented is not presumed to be exact in amount but the margin of error is not great.

⁶ In an effort to verify unexpended depreciation figures I addressed inquiries to a number of corporations and included a schedule designed to show the annual depreciation charge, plant expenditures, plant retirements, and amounts received from plant sales and salvage. The response was not satisfactory, but a number of officials suggested that the procedure just outlined would be reasonably accurate. A letter from Howard Berry, Vice-President and Treasurer of Mathieson Alkali Works, is typical.

"Starting with the Accumulated Depreciation Reserve at the beginning of the year; adding the Depreciation for the year as shown in the Analysis of Income Account and from that total deducting the accumulated Depreciation at the end of the year would give approximately the plant retirements charged against the depreciation reserve.

"This last figure mentioned added to the net increase in the Property Account shown by the Balance Sheet each year should give approximately the total outlay for plant.

"Of course, the foregoing does not take into consideration the net proceeds from the sale of scrap, etc., but this item is more or less negligible."

it was met and to indicate how the various accounts were interpreted.

Reserves were used by many institutions included in this survey and with few exceptions their function is to report uniform amounts of income each year in spite of all actual realities. Some of the common reserves appearing on the equity side of balance sheets are:

Reserve for Contingencies
Reserve for General Contingencies
Reserve for Taxes
Reserve for Investments
Sundry Reserves
General Reserves
Reserve for Insurance
Reserve for Depreciation and Obsolescence
Reserve for Expansion
Reserve for Improvements
Special Reserves
Reserve for Common Dividends
Reserve for Pensions
Reserve for Accident Compensation
Reserve for Collection Expense
Reserve for Losses in Closed Banks
Reserve for Retirement of Bonds
Reserve for Employee Compensation
Reserve for Inventory Losses
Reserve for Shrinkage in Receivables and Inventory
Reserve for Fire Loss
Reserve for Foreign Exchange
Operating Reserve
Reserve for Replacements
Reserve for Depreciation
Reserve for Relining and Rebuilding Furnaces
Reserve for Employee Benefits
Reserve for Capital Expenditures
Reserve for Working Capital
Reserve for Premium on Preferred Stock
Reserve for Redemption of Preferred Stock

One or more of these accounts were employed by nearly all companies and from time to time they were reclassified and combined. By title and general use most reserve accounts can be classified with fair accuracy especially if information is available concerning how the account is operated, but from condensed income reports and balance sheets a categorical treatment must be resorted to because of lack of information.

The most commonly used reserve for contingencies is universally regarded as surplus, but in many instances there was no way to be certain of its nature. In a few cases like the Otis Elevator report of 1925, a debit to surplus and credit to reserve for contingencies of \$1,325,000 leaves no doubt in one's mind. In other cases the charges or credits to contingencies were buried in the operating expense section. In any event, book value of assets must increase or decrease by an amount equal to the change in reserve and there is little choice but to regard the contingency reserve as surplus. Accurate interpretation of changes based on reports to stockholders usually was impossible, since there is no way to know whether changes were a result of actual expenditures, revaluations, profit from exceptional sources, or a reversal of some entry which created the reserve. In the measurement of retained earnings, changes in the reserve for contingencies have been regarded as a correction of reported earnings.

It would be possible to enter into an extended discussion of each reserve account used and to point out the many interpretations which might be given to explain how the entries could affect reported earnings. In the measurement of earnings for one year periods, many charges are made to expense which require no expenditure. This does not deny the validity of the expense, but when net assets increase more than the reported retained earnings some adjustment must be made. Either the asset and liability changes must be denied or the reported income must be adjusted, and in this study (with limitations) the latter procedure is accepted as the situation most likely to approach reality. Reserve accounts appear as credit balances because debits were made to operating expense, income, or surplus. Where entries are purely voluntary and no outside creditor equity can possibly be read into the account, it usually represents segregated surplus at any balance sheet date.

Reserve for insurance is of limited application but it is one of the borderline type and will illustrate implications just made. The principle of self-insurance for fire, flood, tornado, and other hazards is well understood. Where distribution of the risk justifies self-insurance and where calculated on a scientific basis, the annual charge for insurance expense can be accepted as a legitimate charge to the periodic revenue, but the credit to reserve for insurance at any balance sheet date must represent losses provided for which have not occurred. In the final analysis, a charge to insurance premiums actually paid to secure protection is distinctly different from a charge to expense for self-insurance. Protection actually paid for is a real service since it substitutes a certain small cost for an uncertain possible great loss. The self-insurance expense is hardly an expense, because the self-insurer elects to take his own risk. If at the balance sheet date no losses have occurred, assets are greater than they would have been had insurance premiums actually been paid. When destruction results from some cause, the *loss* must and does come in that year. In essence, the self-insurer has fire, flood, tornado, or other similar *expenses* but not *insurance* expense. Annual income reports may be more uniform when self-estimated premiums are recorded as an expense, but it is another case of accounting technique designed to show uniform operating results which are in reality not uniform. In the treatment given, increases and decreases in the reserve for insurance, fire loss, and similar reserves were regarded as additions to or deductions from reported retained income.

It was not always possible to be certain of the nature of changes and adjustments in the reserve accounts and in most companies not a hint of explanation appeared in the reports. Large amounts and common accounts in most instances were interpreted with reasonable satisfaction. The lack of information contained in reports to stockholders and the apparently inconsistent and thoughtless manner in which the accounts are used proved to be annoying, but the utterly impossible tangles would form a very small part of the total earnings reported.

Procedure Illustration

The measurement of prosperity earnings retained and the amount of dividends paid from those retained earnings in subsequent years is not an easy task as already indicated. The procedure and technique of measuring retained earnings, their investment and liquidation, is better understood if we observe in detail the operating results of a particular company during the fifteen years. Hudson Motor Car Company is a purposely simple illustration as the surplus entries are not numerous and all represent outright expenses and the reserve for contingencies is easily understood.

Cash dividends paid, deducted from reported income available to common stockholders, is adjusted for the entries made directly in the surplus and reserve for contingency accounts, and combined with the new capital issued or retired gives the annual amount "Available for Investment."⁷

The schedule of Investment and Disinvestment shows precisely how the funds were invested during profitable years and which assets were liquidated to meet losses and pay dividends during the depression. The detailed figures of Hudson Motor Car Company show how all the data were assembled for each of the seventy-two companies.

⁷ To the amount "Available for Investment" presented in the schedule of Operating Results, should be added "unexpended depreciation." In the tables unexpended depreciation is considered available for use, but is shown in the illustration in a manner designed to keep income sheet and balance sheet items clearly separated.

**Hudson Motor Car Company
Operating Results, 1922-36
(Figures in thousands)**

Year	Available to Common	Common Dividends	Retained Earnings Reported	Surplus Adjustments	Contingency Reserve	Total Adjustments	Retained Earnings Adjusted	New Issues	Available for Investment
1922	\$ 7,243	\$ 1,761	\$ 5,482	\$ 733*	-0-	\$ 733	\$ 6,214	\$ 14	\$ 6,228
1923	8,004	3,601	4,403	-232†	-0-	-232	4,171	-0-	4,171
1924	8,073	3,781	4,292	-250†	250	-0-	4,292	-0-	4,292
1925	21,378	4,975	16,403	-230†	51	-179	16,225	125	16,350
1926	5,373	5,189	184	-108†	-8	-116	68	-0-	68
1927	14,431	6,918	7,513	-150†	150	-0-	7,513	-0-	7,513
1928	13,457	8,179	5,278	-300†	149	-1	5,277	-0-	5,277
1929	11,595	8,180	3,415	-300†	594	294	3,709	-0-	3,709
Totals	\$ 89,554	\$ 42,584	\$ 46,970	\$ 687	\$ 1,186	\$ 499	\$ 47,469	\$ 139	\$ 47,608
1930	325	6,518	-6,194	-2,266§	-306	-2,572	-8,766	-626	-8,392
1931	-1,991	1,597	-3,588	-6,533§	2,372	-4,161	-7,749	-546	-8,295
1932	-5,429	-0-	-5,429	-3,031†	-2,019	-5,050	-10,479	871	-9,608
1933	-4,410	-0-	-4,410	-0-	672	672	-3,738	-603	-4,341
1934	-3,239	-0-	-3,239	-0-	6	6	-3,233	263	-2,970
Totals	\$ -14,744	\$ 8,115	\$ -22,860	\$ -11,830	\$ 725	\$ -11,105	\$ -33,965	\$ -641	\$ -34,606
1935	585	-0-	585	483	-95	388	973	5,259	6,232
1936	3,306	-0-	3,306	-0-	83	83	3,389	-1,900	1,489
Totals	\$ 3,891	-0-	\$ 3,891	\$ 483	\$ -12	\$ 471	\$ 4,362	\$ 3,359	\$ 7,721

* No explanation

† Prior year taxes.

Transferred to COI year 1945.

• Financial costs of treatment

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CORPORATE PROFITS

111

Hudson Motor Car Company
Investment and Disinvestment, 1922-29
(Figures in thousands)

Item	1921	1922	1923	1924	1925	1926	1927	1928	1929	Total Prosperity Investment
Working capital										
Cash	\$ 1,290	\$ 7,327	\$ 5,354	\$ 6,877	\$ 6,715	\$ 4,463	\$ 5,286	\$ 6,015	\$ 4,760	\$ 3,470
Government securities	\$ 0-0	\$ 0-0	\$ 4,000	\$ 6,000	\$ 17,000	\$ 6,000	\$ 8,000	\$ 14,000	\$ 12,385	\$ 12,385
Receivables	1,041	2,883	602	2,607	5,069	1,912	3,564	5,007	3,862	2,821
Inventories	3,558	5,378	6,433	6,118	11,055	9,186	13,989	13,168	13,467	9,909
Prepays	\$ 0-0	\$ 0-0	\$ 0-0	\$ 0-0	\$ 0-0	\$ 0-0	\$ 0-0	\$ 0-0	\$ 0-0	\$ 0-0
Total current	\$ 5,888	\$ 15,498	\$ 16,410	\$ 21,602	\$ 39,839	\$ 21,561	\$ 30,839	\$ 38,190	\$ 34,474	\$ 28,585
Current liabilities										
Net working capital	\$ 2,926	\$ 6,044	\$ 4,776	\$ 6,551	\$ 14,705	\$ 7,341	\$ 10,796	\$ 12,076	\$ 8,865	\$ 5,939
Change	\$ 2,962	\$ 9,454	\$ 11,684	\$ 15,051	\$ 25,135	\$ 14,221	\$ 20,043	\$ 26,114	\$ 25,608	
Investments	\$ 79	\$ 68	\$ 69	\$ 84	\$ 81	\$ 39	\$ 41	\$ 40	\$ 39	
Change	\$ 162	\$ 140	\$ 857	\$ 955	\$ 537	\$ 787	\$ 1,047	\$ 935	\$ 947	
Deferred charges										
Change										
Plant assets	\$ 13,142	\$ 15,259	\$ 17,277	\$ 25,425	\$ 38,795	\$ 42,976	\$ 44,701	\$ 51,629		
Allowance for depreciation	4,314	5,209	6,414	7,875	10,471	13,223	15,629	18,353		
Net plant assets	\$ 9,059	\$ 8,828	\$ 10,050	\$ 10,863	\$ 17,550	\$ 28,324	\$ 29,753	\$ 29,072	\$ 33,276	
Change										
Net investment										
	\$ 6,228	\$ 4,170	\$ 4,293	\$ 16,349	\$ 68	\$ 7,513	\$ 5,278	\$ 3,710	\$ 47,608	

Hudson Motor Car Company
Investment and Disinvestment, 1930-36
(Figures in thousands)

Item	1930	1931	1932	1933	1934	Disinvest- ment 1930-34	1935	1936	Invest- ment 1935-36
Working capital									
Cash	\$ 4,953	\$ 1,841	\$ 2,110	\$ 2,335	\$ 2,576	\$ 2,184	\$ 9,584	\$ 10,038	\$ 7,462
Government securities	9,030	7,068	2,089	345	-0-	12,385	-0-	1,999	1,999
Receivables	4,306	1,364	853	361	745	3,117	1,810	1,731	986
Inventories	6,844	4,476	3,615	4,492	4,562	8,905	4,885	8,006	3,444
Prepays	-0-	-0-	-0-	-0-	393	-393	392	405	12
Total current	\$25,133	\$14,749	\$ 8,666	\$ 7,533	\$ 8,276	\$26,198	\$16,671	\$22,179	\$13,903
Current liabilities	5,301	3,590	2,200	4,461	6,138	2,727	6,704	9,794	3,656
Net working capital									
Change	\$19,832	\$11,159	\$ 6,466	\$ 3,072	\$ 2,138		\$ 9,967	\$12,385	
Investments	-5,776	-8,673	-4,693	-3,394	-934	\$23,471	\$ 7,829	2,418	\$10,247
Change	\$ 38	\$ 30	\$ 11	\$ 178	\$ 152	\$ 113	\$ 143	\$ 202	
Deferred charges	-0-	-8	-19	167	-26		-9	59	\$ 50
Change	\$ 435	\$ 610	\$ 484	\$ 545	\$ 407		\$ 414	\$ 389	
Sundry assets	-512	175	-126	61	-138	\$ 540	\$ 7	-25	\$ -18
Plant assets	\$ 0-	\$ 1,046	\$ -0-	\$ 0-	\$ 0-		\$ 0-	\$ 0-	\$ 0-
Change	\$51,896	\$53,501	\$49,358	\$49,792	\$49,421		\$49,163	\$48,662	
Allowance for depreciation	21,723	24,163	23,744	25,352	26,853		28,191	28,654	
Net plant assets	\$30,173	\$29,338	\$25,614	\$24,440	\$22,568		\$20,972	\$20,008	
Change	-3,104	-835	-3,724	-1,174	-1,872	\$10,708	-1,596	-964	\$ 2,559
Net investment or disinvestment	\$ 9,392	\$ 8,295	\$ 9,608	\$ 4,340	\$ 2,970	\$34,606	\$ 6,231	\$ 1,488	\$ 7,720

APPENDIX III A

SELECTED EXAMPLES OF COMPANIES THAT PAID DIVIDENDS MATERIALLY IN EXCESS OF DEPRESSION EARNINGS

The *earning deficiency* reported arises when net income is less than interest and dividend payments. In case a company operated at a loss, payment of interest and dividends added to losses gives the earning deficiency. The reported deficiency does not represent a loss of current funds because expense and expenditure may differ greatly.

Adjusted earning deficiency includes surplus and net worth reserve adjustments, some of which involve funds while others do not. Assets changed each period by the amount of adjusted retained earnings and represent long run business profits or losses, provided cost figures were kept in the accounts. The adjusted figures do not necessarily imply that funds were made available or depleted within the particular period, however.

The vital question is, how did these companies meet the expenses, losses, and interest and dividend payments which were in excess of the current revenue produced? Which assets were liquidated to provide the funds? It is impossible to arrive at precise figures from data contained in reports to stockholders, but the procedure followed shows the relative amounts of liquidation in the various assets which provided funds to meet the earning deficiencies.

The financial summary of each company is based upon balance sheet figures at important stages in the cycle. Assets were liquidated during the depression and the *net liquidation* is therefore an *adjusted earning deficiency*. In simple language, had earnings been great enough there would be no liquidation of assets. Hence, asset liquidation, either by explicit transaction or write-downs, needs to be accounted for. In most cases we can point out the approximate nonfund adjustments and by the process of elimination arrive at the amount of funds provided to meet the deficiency resulting from lack of adequate revenue.

In the tables of Chapter 3 the *adjusted income after interest* includes only those adjustments to surplus reserves which seem clearly to involve accumulation or liquidation of funds during the period that affect dividend paying ability, whereas the financial summaries in Appendix III are designed to account for all book values.

FINANCIAL SUMMARY
Sears, Roebuck & Company
(In thousands of dollars)

Earning Deficiency Adjusted, 1931-32, \$ 23,823
 Earning Deficiency Reported, 1931-32, \$ 8,626
 Retained Earnings Reported,* 1922-30, \$106,939
 Retained Earnings Adjusted, 1922-30, \$107,009

Item	1921		1930		1932		1931-32 Increase or Decrease
	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent	
Cash	\$ 10,868	11.9	\$ 9,868	10.4	\$ 7,630	15.2	\$ -2,238
Liquid securities	11,286	12.4	17,695	18.6	5,519	11.0	-12,176†
Receivables	52,579	57.8	37,248	39.1	20,097	40.1	-17,151‡
Inventories	53,327	58.7	63,501	66.6	52,027	103.9	-11,474
Total current assets	\$128,060	140.9	\$128,312	134.6	\$ 85,273	170.2	\$-43,039
Current liabilities§	37,157	40.9	32,984	34.6	35,177	70.2	+2,194
Net working capital	\$ 90,903	61.5	\$ 95,328	47.4	\$ 50,096	28.5	\$-45,233
Securities	3,932	2.7	5,583	2.8	33,175	18.9	27,591
Sundry assets			4,972	2.5	4,000	2.3	-972
Intangibles	30,000	20.3	10,000	5.0	10,000	5.7	-0-
Plant assets	22,928	15.5	85,098	42.3	78,398	44.6	-0-
Total	\$147,703	100.0	\$200,982	100.0	\$175,668	100.0	\$-18,614
Unexpended depreciation							6,700
Total liquidation							\$ 25,314
Stock retired							1,491
Deficiency accounted for							\$ 23,823
Surplus reserves//	\$ 6,365		\$ 82,282		\$ 56,068		\$-26,214
Losses					-\$0-		
Interest and dividends					8,626		
Write-downs and adjustments					17,588		
					\$ 82,282		

* 63 per cent of total net income.

† Write-down, \$6,533.

‡ Loss on collections, \$3,733.

§ Note that current liabilities became relatively a much greater equity by 1932.

// Includes \$2,392,000 stock dividends.

FINANCIAL SUMMARY
American Tobacco Company
(In thousands of dollars)

Earning Deficiency Adjusted, 1933-36, \$21,438
 Earning Deficiency Reported, 1933-36, \$19,216
 Retained Earnings Reported,* 1922-32, \$74,731
 Retained Earnings Adjusted, 1922-32, \$73,906

Item	1921		1932		1936		1933-36 Increase or Decrease
	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent	
Cash	\$ 10,854	12	\$ 46,460	28	\$ 19,502	13	\$-26,958
Receivables	12,151	13	16,100	10	13,597	9	-2,503
Inventories	78,936	86	114,687	70	122,398	85	7,711
Total current assets	\$101,941	111	\$177,247	108	\$155,497	107	\$-21,750
Current liabilities	10,296	-11	13,293	-8	10,698	-7	-2,596
Net working capital	\$ 91,644	51	\$163,954	56	\$144,799	51	\$-19,154
Investments	25,219	14	51,773	18	28,206	10	-23,568
Intangibles	54,099	30	54,099	19	90,848	32	36,749†
Plant assets	9,203	5	20,502	7	17,609	7	-0-
Total	\$180,165	100	\$290,328	100	\$281,462	100	\$-5,973
Unexpended depreciation							2,893
Total liquidation							\$ 8,866
New security issues							12,570
Deficiency accounted for							\$ 21,436
Surplus reserves†	\$ 14,750		\$118,116		\$ 59,930		\$-58,186†
Losses					-0-		
Interest and dividends					19,215		
Write-downs and adjustments†					38,971		
Add: Cost of brand name charged to surplus					\$118,116		36,749
							\$ 21,437

* 24 per cent of total net income.

† The company charged this item to earned surplus, but cash was paid for the brand names and there appears to be ample reason to regard the expenditure as a valid capital asset.

FINANCIAL SUMMARY
General Electric Company
(In thousands of dollars)

Earning Deficiency Adjusted, 1931-33, \$ 96,066
 Earning Deficiency Reported, 1931-33, \$ 38,926
 Retained Earnings Reported,* 1922-30, \$130,432
 Retained Earnings Adjusted, 1922-30, \$186,927

Item	1921		1930		1933		1931-33 Increase or Decrease
	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent	
Cash	\$ 39,889	26	\$141,718	70	\$ 60,902	38	\$-80,816
Liquid securities	23,863	16	-0-	-0-	50,977	32	50,977
Receivables	54,830	36	41,677	21	18,341	11	-23,336
Inventories	74,447	50	76,769	38	49,220	30	-27,549
Total current assets	\$192,029	128	\$260,164	128	\$179,440	111	\$ 80,724
Current liabilities	42,704	28	57,726	28	17,830	11	-39,897
Net working capital	\$150,325	50	\$202,438	45	\$161,610	44	\$-40,827
Investments	75,326	26	204,810	45	154,682	43	-50,128†
Sundry assets	1,697	1	253	-0-	2,672	1	2,421
Plant assets	66,957	23	45,868	10	42,242	12	-0-
Total	\$294,305	100	\$453,368	100	\$361,207	100	\$ 88,534
Unexpended depreciation							3,625
Total liquidation							\$ 92,159
Long term debt issued							3,905
Deficiency accounted for							\$ 96,064
Surplus reserves	\$ 84,106		\$228,105		\$132,039		\$-96,066
Losses					-0-		
Interest and dividends					38,926‡		
Write-downs and sundry					57,139		
adjustments					\$228,105		

* 31 per cent of total net income.

† Write-down.

‡ Includes \$26,440 RCA stock.

FINANCIAL SUMMARY
Chrysler Corporation
(In thousands of dollars)

Earning Deficiency Adjusted, 1930-32, \$35,377
 Earning Deficiency Reported, 1930-32, \$29,420
 Retained Earnings Reported,* 1922-29, \$65,935
 Retained Earnings Adjusted, 1922-29, \$73,938

Item	1921		1929		1932		1930-32 Increase or Decrease
	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent	
Cash	\$ 2,895	21	\$ 36,978	50	\$ 33,736	66	\$ -3,242
Liquid securities	4,121	30	1,730	2	8,867	17	7,137
Receivables	2,151	16	13,503	18	4,702	9	-8,801
Inventories	10,936	79	39,987	54	20,205	40	-19,782
Total current assets	\$20,103	146	\$ 92,198	124	\$ 67,510	132	\$-24,688
Current liabilities	6,279	45	18,928	26	16,395	32	-2,532
Net working capital	\$13,824	24	\$ 73,270	38	\$ 51,115	42	\$-22,156
Investments	983	2	8,920	5	9,180	7	260
Sundry assets	-0-		-0-		-0-		-0-
Intangibles	25,030	44	25,000	13	-0-		-25,000†
Plant assets	16,678	30	83,624	44	61,697	51	-0-
Total	\$56,515	100	\$190,814	100	\$121,991	100	\$ 21,896
Unexpended depreciation							21,928
Total liquidation							\$ 43,824
Debt and stock retired							8,447
Deficiency accounted for							\$ 35,377
Surplus reserves	\$ 613		\$ 67,292		\$ 31,916		\$-35,376
Losses					9,551		
Interest and dividends					19,867		
Sundry					5,958		
					\$ 67,292		

* 59 per cent of total net income.

† Write-off.

FINANCIAL SUMMARY
Firestone Tire & Rubber Company
 (In thousands of dollars)

Earning Deficiency Adjusted, 1930-33, \$11,188
 Earning Deficiency Reported, 1930-33, \$ 5,418*
 Retained Earnings Reported,† 1922-29, \$43,221
 Retained Earnings Adjusted, 1922-29, \$35,226

Item	1921		1929		1933		1930-33 Increase or Decrease
	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent	
Cash	\$ 5,889	96	\$ 30,039	38	\$ 14,320	28	\$-15,719
Liquid securities	-0-	-0-	-0-	-0-	-0-	-0-	-0-
Receivables	12,181	198	17,188	22	13,905	28	-3,283
Inventories	12,534	203	41,360	52	28,816	57	-12,544
Total current assets	\$30,604	497	\$ 88,586	112	\$ 57,042	113	\$-31,546
Current liabilities	24,443	397	8,537	11	6,563	13	-1,974
Net working capital	\$ 6,161	15	\$ 80,049	52	\$ 50,478	41	\$-29,572
Investments	7,433	18	11,516	8	9,443	8	-2,045
Sundry assets	6,617	16	10,461	7	4,095	3	-6,394
Intangibles	-0-	-0-	-0-	-0-	-0-	-0-	-0-
Plant assets	21,553	51	51,084	33	58,945	48	7,861
Total	\$41,764	100	\$153,110	100	\$122,962	100	\$ 30,150
Unexpended depreciation							-0-
Total liquidation							\$ 30,150
Stock and debt retired							18,959
Deficiency accounted for							\$ 11,191
Surplus reserves	\$16,873		\$ 47,954		\$ 36,615		
Losses					-0-		
Interest and dividends					4,638		
Sundry					6,701		
					\$ 47,954		

* \$4,825 charged to net worth reserves.

† 58 per cent of total net income.

APPENDIX III B

SELECTED EXAMPLES OF COMPANIES THAT PAID DIVIDENDS AFTER LOSSES

FINANCIAL SUMMARY International Harvester Company (In thousands of dollars)

Earning Deficiency Adjusted, 1931-34, \$29,411
 Earning Deficiency Reported, 1931-34, \$49,486
 Retained Earnings Reported,* 1922-30, \$81,832
 Retained Earnings Adjusted, 1922-30, \$94,105

Item	1921		1930		1934		1931-34 Increase or Decrease
	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent	
Cash	\$ 8,362	5	\$ 27,643	12	\$ 28,807	14	\$ 1,164
Marketable securities	823	1	2,653	1	34,311	17	31,658
Receivables	56,283	37	136,075	61	70,183	35	-65,892
Inventories	114,086	75	90,738	40	92,268	45	-1,530
Total current assets	\$179,554	118	\$257,109	114	\$225,569	111	\$-31,540
Current liabilities	27,508	18	31,641	14	22,387	11	\$-9,255
Net working capital	\$152,046	63	\$225,468	64	\$203,182	64	\$-22,285
Investments	-0-	-0-	8,432	2	8,812	2	379
Sundry assets	4,087	2	551	-0-	547	-0-	-4
Intangibles	-0-	-0-	-0-	-0-	-0-	-0-	-0-
Plant assets	83,030	35	117,708	34	104,341	34	
Total	\$239,163	100	\$352,159	100	\$316,882	100	
Unexpended depreciation							13,368
Total liquidation							\$ 35,278
New capital issues							\$-5,867
Deficiency accounted for							\$ 29,411
Surplus reserves	\$ 82,932		\$ 94,789		\$ 65,378		\$-29,411
Losses					5,295		
Interest and dividends					45,312		
Sundry adjustments			(increase)†		21,196		
					\$ 94,789		

* 44 per cent of total net income.

† Secret reserve for inventory prices restored to surplus.

FINANCIAL SUMMARY
Westinghouse Electric & Manufacturing Company
 (In thousands of dollars)

Earning Deficiency Adjusted, 1931-33, \$55,414
 Earning Deficiency Reported, 1931-33, \$38,576
 Retained Earnings Reported, 1922-30, \$62,458
 Retained Earnings Adjusted, 1922-30, \$49,820

Item	1921		1930		1933		1931-33 Increase or Decrease
	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent	
Cash	\$ 10,031	11	\$ 24,119	24	\$ 14,468	20	\$ -9,651
Marketable securities	7,886	9	8,541	8	12,719	18	4,178
Receivables	23,808	28	37,206	37	16,591	24	-20,615
Inventories	55,890	65	46,331	46	32,983	46	-13,348
Total current assets	\$ 97,615	113	\$ 116,198	115	\$ 76,761	108	\$ -39,436
Current liabilities	11,400	13	15,187	15	5,451	8	-9,736
Net working capital	\$ 86,215	55	\$ 101,011	44	\$ 71,310	41	\$ -29,700
Investments	17,029	11	57,682	25	36,904	21	-20,779†
Sundry assets							
Intangible assets	4,483	3	-0-		-0-		-0-
Plant assets	47,943	31	72,272	31	67,199	38	-0-
Total	\$155,670	100	\$230,965	100	\$175,413	100	\$-50,479
Unexpended depreciation							5,073
Total liquidation							\$ 55,552
New capital issues							-139
Deficiency accounted for							\$ 55,413
Surplus reserves	\$ 44,608		\$ 97,650		\$ 42,237		\$-55,413
Losses					21,197		
Interest and dividends					17,380		
Write-downs and sundry adjustments					16,836		
					\$ 97,650		

* 29 per cent of total net income.

† Write-down \$16,233,000.

FINANCIAL SUMMARY
B. F. Goodrich Company
(In thousands of dollars)

Earning Deficiency Adjusted, 1930-33, \$35,520
Earning Deficiency Reported, 1930-33, \$25,231
Retained Earnings Reported,* 1922-29, \$22,775
Retained Earnings Adjusted, 1922-29, \$12,364

Item	1921		1929		1933		1930-33 Increase or Decrease
	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent	
Cash	\$ 2,574	5	\$ 10,501	18	\$ 9,309	21	\$ -1,192
Marketable securities	43	—	—	—	2,782	6	2,782
Receivables	19,408	39	33,739	57	15,649	35	-18,090
Inventories	30,213	62	46,285	79	25,901	57	-20,384
Total current assets	\$52,238	107	\$ 90,525	154	\$ 53,642	119	\$-36,883
Current liabilities	3,621	7	31,605	54	8,426	19	-23,178
Net working capital	\$48,617	57	\$ 58,920	45	\$ 45,216	43	\$-13,706
Investments	4,447	5	2,466	2	15,472	14	13,007
Sundry assets	-0—	—	1,752	1	688	1	-1,065
Intangible assets							
Plant assets	32,116	38	67,600	52	44,587	42	-14,373
Total	\$85,180	100	\$130,737	100	\$105,963	100	\$-16,137
Unexpended depreciation							8,639
Total liquidation							\$ 24,776
New capital issues							10,746
Deficiency accounted for							\$ 35,522
Surplus reserves	\$16,873		\$128,202		\$ -1,942		\$-30,144†
Losses					8,808		
Interest and dividends					14,957		
Write-downs and sundry					6,379		
adjustments							
					\$ 28,202		

* 30 per cent of total net income.

† Discrepancy due to stock issues and revaluations.

FINANCIAL SUMMARY
United States Steel Corporation
(In thousands of dollars)

Earning Deficiency Adjusted, 1931-34, \$246,840
 Earning Deficiency Reported, 1931-34, \$213,638
 Retained Earnings Reported,* 1922-30, \$332,577
 Retained Earnings Adjusted, 1922-30, \$342,392

Item	1921		1930		1934		1931-34 Increase or Decrease
	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent	
Cash	\$ 123,781	25	\$ 126,741	27	\$ 71,305	19	\$ -55,436
Marketable securities	131,463	27	71,066	15	54,626	15	-16,440
Receivables	72,683	15	57,513	12	36,832	10	-20,681
Inventories	241,504	50	323,053	69	257,360	71	-65,693
Total current assets	\$ 569,431	117	\$ 578,373	123	\$ 420,122	115	\$ -158,210
Current liabilities	84,249	17	108,873	23	55,987	15	-32,887
Net working capital	\$ 485,182	22	\$ 469,500	21	\$ 364,135	17	\$ -105,363
Investments	14,173	1	20,692	1	16,358	1	-4,333
Sundry assets	54,799	2	51,336	2	13,259	1	-38,077
Intangible assets	55,907	2	60,816	3	8,229	1	-58,587
Plant assets	1,644,795	73	1,677,327	73	1,626,144	80	-21,000†
Total	\$2,254,856	100	\$2,285,671	100	\$2,028,126	100	\$ 227,360
Unexpended depreciation							30,184
Total liquidation							\$ 257,544
Capital retired							10,705
Deficiency accounted for							\$ 1246,839
Surplus reserves	\$ 813,758		\$ 845,310		\$ 598,469		\$-246,841
Losses					95,308		
Interest and dividends					118,331		
Write-downs and sundry					33,202		
adjustments							
					\$ 845,310		

* 30 per cent of total net income.

† Write-down \$21,000.

FINANCIAL SUMMARY
Hudson Motor Car Company
(In thousands of dollars)

Earning Deficiency Adjusted, 1929-34, \$33,964
 Earning Deficiency Reported, 1929-34, \$22,859
 Retained Earnings Reported,* 1922-29, \$46,970
 Retained Earnings Adjusted, 1922-29, \$47,469

Item	1921		1929		1934		1929-34 Increase or Decrease
	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent	
Cash	\$ 1,290	44	\$ 4,760	19	\$ 2,576	120	\$ -2,184
Marketable securities	-0		12,385	48	-0		-12,385
Receivables	1,041	35	3,862	15	745	35	-3,117
Inventories	3,558	120	13,467	53	4,955	232	-8,512
Total current assets	\$ 5,888	199	\$34,474	135	\$ 8,276	387	\$-26,198
Current liabilities	2,926	99	8,865	35	6,138	287	2,727
Net working capital	\$ 2,962	24	\$25,608	43	\$ 2,138	8	\$-23,471
Investments	79	1	38	-0-	152	1	114
Sundry assets	162	1	947	2	407	2	-540
Intangible assets							
Plant assets	9,059	74	33,276	55	22,567	89	-5,264
Total	\$12,262	100	\$59,870	100	\$25,264	100	\$-29,161
Unexpended depreciation							5,445
Total liquidation							\$ 34,606
New security issues							-641
Deficiency accounted for							\$ 33,965
Surplus reserves	\$ 9,775		\$39,912		\$ 5,947		
Losses					14,640		
Interest and dividends					8,219		
Write-downs and sundry adjustments					11,106		33,965
					\$39,912		

* 52 per cent of total net income.

APPENDIX III C

SELECTED EXAMPLES OF COMPANIES THAT PAID NO DEPRESSION DIVIDENDS

FINANCIAL SUMMARY American Cyanamid & Chemical Corporation (In thousands of dollars)

Retained Earnings Adjusted, 1931-33, \dagger \$3,529
 Retained Earnings Reported, 1931-33, \dagger \$3,339
 Retained Earnings Reported,* 1922-30, \$5,858
 Retained Earnings Adjusted, 1922-30, \$2,347

Item	1921		1930		1933		1931-33 Increase or Decrease	Liqui- dation
	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent		
Cash	\$ 380	19	\$ 2,533	14	\$ 5,847	38	\$ 3,314	13%
Marketable securities	50	2	3,272	18	255	2	-3,017	-92
Receivables	136	7	4,917	26	3,918	25	-999	-20
Inventories	1,901	96	12,771	69	9,863	64	-2,908	-23
Total current assets	\$ 2,469	125	\$23,492	126	\$19,883	128	\$ -3,609	-15%
Current liabilities	500	25	4,878	26	4,362	28	-516	-11
Net working capital	\$ 1,969	12	\$18,614	23	\$15,522	33	\$ -3,094	-17%
Investments	5,280	32	1,621	2	5,791	12	4,170	
Sundry assets			2,530	3			-2,530	
Intangible assets	4,821	30	17,130	21	5,000	10	-12,130 \dagger	
Plant assets	4,242	26	42,535	51	21,383	45	-21,151 \dagger	
Total Unexpected depreciation	\$16,312	100	\$82,429	100	\$47,695	100	\$ 34,734	
Total liquidation							\$ 34,734	
Capital stock write-down							28,558 \dagger	
Capital surplus reduction							10,749 \dagger	
Debt increase							1,045	
Net capital adjustment							\$ 38,262	
Excess of capital write-down over asset decrease (retained earnings)							\$ 3,528	
Surplus reserves	\$ 3,291		\$ 4,197		\$ 7,724		\$ 3,527	
Reported income retained					3,339			
Dividends and interest					-0			
Sundry adjustments					188			
					\$ 4,197			

* 36 per cent of total net income.

\dagger Write-down against capital stock.

FINANCIAL SUMMARY
Baldwin Locomotive Works
(In thousands of dollars)

Earning Deficiency Adjusted, 1931-33, \$14,639
 Earning Deficiency Reported, 1931-33, \$12,759
 Retained Earnings Reported,* 1922-33, \$ 7,231
 Retained Earnings Adjusted, 1922-33, \$ 66

Item	1921		1930		1933		1931-33 Increase or Decrease	Liqui- dation
	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent		
Cash	\$ 2,056	6	\$13,454	61	\$ 7,649	58	\$ -5,805	-43%
Marketable securities	24,392	71	1,058	5	234	2	-824	-78
Receivables	17,134	50	5,349	24	1,853	14	-3,496	-65
Inventories	5,161	15	8,689	39	5,266	40	-3,423	-39
Total current assets	\$48,743	142	\$28,549	129	\$15,001	113	\$-13,548	-47%
Current liabilities	14,379	42	6,459	29	1,768	13	-4,691	-72
Net working capital	\$34,364	51	\$22,090	24	\$13,233	17	\$ -8,857	-40%
Investments	4,429	7	12,824	14	6,175	8	-6,649	-52
Sundry assets	1,678	2	5,898	6	7,306	9	1,408	24
Intangible assets								
Plant assets	27,079	40	52,880	56	50,406	66		
Total	\$67,550	100	\$93,692	100	\$77,120	100	\$ 14,098	
Unexpended depreciation							2,474	
Total liquidation							\$ 16,572	
Capital retired							1,935	
Deficiency accounted for							\$ 14,637	
Surplus reserves	\$17,552		\$23,706		\$ 9,251		\$-14,455†	
Losses					8,642			
Dividends and interest					4,116			
(\$3,416 interest)					1,697			
Write-downs and adjustments					\$23,706			

* 18 per cent of total net income.

† Difference of \$182,000 due to revaluation of common stock and charges to created capital surplus.

FINANCIAL SUMMARY
Chicago Pneumatic Tool Company
 (In thousands of dollars)

Earning Deficiency Adjusted, 1931-34, \$ 507
 Earning Deficiency Reported, 1931-34, \$ 931
 Retained Earnings Reported,* 1922-30, \$3,144
 Retained Earnings Adjusted, 1922-30, \$ -51

Item	1921		1930		1934		1931-34 Increase or Decrease	Liqui- dation
	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent		
Cash	\$ 546	7	\$ 446	6	\$ 305	5	\$ -141	-32%
Marketable securities	11							
Receivables	1,017	12	2,044	27	1,729	27	-315	-15
Inventories	8,167	98	6,976	91	5,891	90	-1,085	-16
Total current assets	\$ 9,741	117	\$ 9,466	124	\$ 7,924	122	\$ -1,542	-16%
Current liabilities	1,405	17	1,801	24	1,407	22	-395	-21
Net working capital	\$ 8,335	48	\$ 7,665	40	\$ 6,518	37	\$ -1,146	-15%
Investments	33		277	2	483	3	205	74
Sundry assets								
Intangible assets								
Plant assets	8,922	52	10,967	58	10,272	60		6
Total	\$17,290	100	\$18,909	100	\$17,272	100	\$ 941	
Unexpended depreciation							695	
Total liquidation							\$ 1,637	
Capital retired							1,129	
Deficiency accounted for							\$ 508	
Surplus reserves	\$ 4,642		\$ 4,593		\$ 4,085		\$ -508	
Losses					68			
Interest					864			
Sundry adjustments					+424			

* 33 per cent of total net income.

FINANCIAL SUMMARY
United States Rubber Company
 (In thousands of dollars)

Earning Deficiency Adjusted, 1930-33, \$49,668
 Earning Deficiency Reported, 1930-33, \$25,563
 Retained Earnings Reported,* 1922-29, \$36,344
 Retained Earnings Adjusted, 1922-29, \$16,232

Item	1921		1929		1933		1930-33 Increase or Decrease	Liqui- dation
	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent		
Cash	\$ 12,999	16	\$ 16,800	21	\$ 8,054	20	\$ -8,746	-52%
Marketable securities					139		139	---
Receivables	43,714	52	42,453	53	16,653	42	-25,800	-61
Inventories	76,942	92	57,500	72	25,254	64	-32,246	-56
Total current assets	\$133,655	160	\$116,752	147	\$ 50,099	127	\$-66,653	-57%
Current liabilities	49,931	60	37,304	47	10,778	27	-36,525	-71
Net working capital	\$ 83,724	31	\$ 79,448	29	\$ 39,321	26	\$-40,128	-62%
Investments	9,068	3	27,103	10	33,413	22	6,310	23
Sundry assets	11,273	4	3,727	1	1,623	1	-2,105	-56
Intangible assets			58,925	22			-58,925†	
Plant assets	169,657	62	101,384	48	77,586	51		
Total	\$273,722	100	\$270,588	100	\$151,943	100	\$ 35,922	
Unexpended depreciation							23,798	23
Total liquidation							\$ 59,720	
Capital retired							10,052	
Deficiency accounted for							\$ 49,668	
Surplus reserves	\$ 41,383		\$ 25,152		\$-24,514		\$-49,666	
Losses					10,767			
Interest					14,852			
Write-downs					24,047			

* 32 per cent of total net income.

† Adjustment, \$-58,925 omitted in totals.

FINANCIAL SUMMARY
Republic Steel Corporation
(In thousands of dollars)

Earning Deficiency Adjusted, 1931-34, \$32,395
 Earning Deficiency Reported, 1931-34, \$26,456
 Retained Earnings Reported,* 1922-30, \$ 5,424
 Retained Earnings Adjusted, 1922-30, \$ 7,058

Item	1921		1930		1934		1931-34 Increase or Decrease	Liquid- ation
	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent		
Cash	\$ 1,292	8	\$ 8,628	21	\$ 6,505	22	\$ -2,123	-25%
Marketable securities								
Receivables	3,686	24	9,633	23	7,772	26	-1,861	-19
Inventories	16,719	110	38,997	94	28,981	98	-10,016	-26
Total current assets	\$ 21,698	143	\$ 57,258	138	\$ 43,258	147	\$-14,000	-24%
Current liabilities	6,517	43	15,877	38	13,751	47	-2,127	-13
Net working capital	\$ 15,180	15	\$ 41,381	14	\$ 29,507	12	\$-11,873	-29%
Investments	1,910	2	19,648	7	18,294	7	-1,354	-7
Sundry assets	1,452	1	1,575	1	1,079		-496	-31
Intangible assets								
Plant assets	81,754	82	230,020	78	199,857	81		
Total	\$100,796	100	\$292,624	100	\$248,737	100	\$ 13,723	
Unexpended depreciation							30,164	
Total liquidation							\$ 43,887	
Capital retired							11,493	
Deficiency accounted for							\$ 32,394	
Surplus reserves	\$ 31,939		\$ 80,210		\$ 48,011		\$-32,199†	
Losses					12,747			
Dividends and interest					13,708			
(\$13,278 interest)					5,744			
Write-downs and sundry								
					\$ 80,210			

* 12 per cent of total net income.

† Capital surplus credits resulting from sale of treasury stock \$195,000.

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INDEX

Application of funds, 68, 71, 74
Assets
 Increase from retained earnings, 37-39
 Invested, 97-99
 Liquidation, 80-91
Automatic saving, 9
Benefits from retained earnings, 22-23
Capital, nature of, 21-22
Companies in sample, 27, 97-99
Company earning records, 42-44
Corporate expansion, 37-39
Corporate income, 3
Depreciation, 101-105
Detachment of ownership, 2
Diffusion of ownership, 4-5
Disinvesting, 20
Dividends
 After losses, 83-87
 Companies that reduced dividends less than 65 per cent, 49-59
 Companies with best record, 46-49
 Companies with poorest record, 59-64
 Depend upon current revenue, 19-21
 From surplus, 12-14
 Measure of, 45-47
 Of largest companies, 35
Earning deficiencies, 80
Effectiveness of corporate reserves, 9-17
Examples of surplus adjustments, 100
Financial summaries, 114-28
Income administration
 Conflict of interests, 5
 Conservatism in, 7
 Income produced, 3-4
 Income retained, 34-36
 Need for detailed knowledge of, 1
 Why retain income, 6
Income determination, 100-108
Liquidation of assets, 80-91
Nature of surplus, 18
New capital issues, 37-40, 42-44
Objectives of study, 23-26
Overexpansion, 29
Procedure illustrated, 109-12
Profit motive, 6
Reserve accounts
 Adjustments, 105
 Classification, 105
 Interpretation, 107-108
Retained earnings
 Amount of, 34-41
 Benefits possible, 22-23
 By industries, 39, 42-44
 By size of company, 35
 Criticism of, 14-17
 Effectiveness of, 10-13
 Expansion from, 36-39
 Manner of investing, 20, 21, 23, 67-80
 Measurement of, 109-12
 Reasons for, 6-8
Sample
 Adequacy of, 30-33
 Characteristics of, 28-29
 Companies in, 97-99
 Period covered, 27
 Source of data, 27
Selected companies
 That paid dividends after losses, 119-23
 That paid dividends materially in excess of earnings, 113-18
 That paid no depression dividends, 124-28
Surplus
 Adjustments, 25, 45, 98
 Amount, 31-33
 As depression cushion, 2
 Dividends from, 17, 19, 22, 49, 59, 61
 Effectiveness of, 10-13
 Funds, 20, 23
 Nature of, 18, 19, 24
Unexpended depreciation, 101-105

